

# Department of Health Care Policy and Financing Medicaid Caseload FY 2017-18 Budget Request

February 2017

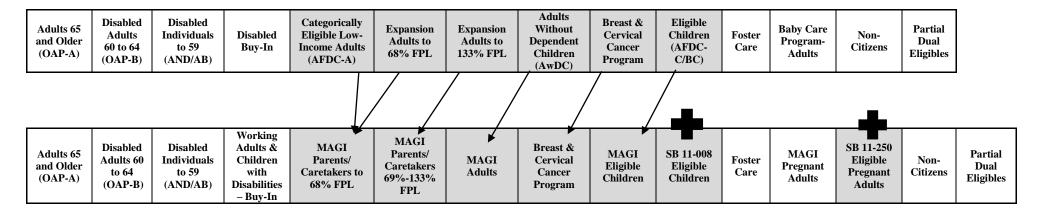
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#### CHANGES TO THE ELIGIBILITY CATEGORIES

The Department of Health Care Policy and Financing ("the Department") previously altered the eligibility categories to reflect the different Federal Medical Assistance Percentage (FMAP) that is applied to different categories. Several steps in Medicaid expansion (described below) introduced new categories with an enhanced FMAP. Forecasting caseload by eligibility and FMAP categories allows for a more accurate expenditure estimate for each funding source. Beginning with the August 2014 JBC Monthly Report, caseload was restated to align with the eligibility categories described below.

- "Categorically Eligible Low-Income Adults" and "Expansion Adults to 68%" were combined into one category called "MAGI Parents/Caretakers to 68% FPL."
- "Expansion Adults to 133% FPL" is now titled "MAGI Parents/Caretakers 69%-133% FPL"
- On January 1, 2013, Colorado implemented SB 11-008 and SB 11-250 which expanded Medicaid Eligible Children to 133% FPL (142% FPL with MAGI disregards after October 2013) for all ages and expanded Baby-Care Adults to 185% FPL (195% FPL with MAGI disregards after October 2013). The incremental increase in eligibility receives and enhanced match equal to the CHP+ FMAP. Eligible Children and Baby-Care Adults are now separated into two categories each; MAGI Eligible Children and SB 11-008 Eligible Children, and MAGI Pregnant Adults and SB 11-250 Eligible Pregnant Adults.



# **MEDICAID CASELOAD**

#### INTRODUCTION

Biannually, the Department submits its estimated funding need for the Medical Services Premiums line item. The first step in generating the November and February submissions is to project the Medicaid caseload. Medicaid caseload does not represent the number of uninsured individuals in Colorado, nor does it represent the number of Colorado residents living in poverty. Caseload figures only represent individuals that the Department expects will enroll in Medicaid because they meet specific eligibility requirements in one of three groups: 1) Families, Pregnant Women, and Children; 2) Aged and Disabled; or 3) Other.

Federal Medicaid statute defines over 50 groups of individuals that may qualify for Medicaid. Some groups are mandatory, while others are optional and each state decides which of the optional groups it will cover. From the inception of Medicaid in 1965 (Public Law 89-97) to the 1980s, the program was targeted at low-income families, the elderly, and individuals with disabilities. During the 1980s, Medicaid expanded to include pregnant women and children with greater income levels, as well as some optional elderly and disabled groups. In 2000, Medicaid coverage was extended to women with breast and cervical cancer. From the 1990s to the present, other Medicaid categories have been added through State-initiated waivers. All eligibility categories have specific income limits, and some have additional criteria such as age, resources or disability status. For budgetary purposes, the Department groups together clients with similar characteristics and costs. For example, clients grouped in the MAGI Eligible Children category have similar characteristics and costs but might have gained Medicaid eligibility through different criteria. Since each category of eligibility is affected by unique factors, the Department projects each category separately. Projecting an aggregate caseload would be easier but less precise.

Historic caseload data are used in conjunction with economic data to project caseload in each category. To make a projection, the Department uses several different statistical techniques (as described in the Forecast Models section) and chooses the projection that best fits the data. After projections are chosen for each category, the Department presents its recommendations to the Office of State Planning and Budgeting (OSPB). The Department then meets with OSPB, and the two agencies agree on an Executive caseload proposal. It is important to note that the methodology the Department used to generate its projections is not wholly reflected by the Executive caseload proposal presented in this document, since those figures are often the result of compromises with OSPB.

In 2003, the process of projecting the Medicaid caseload was drastically affected by SB 03-196, which mandated that the Department transition from accrual to cash-based accounting. From that point forward, caseload numbers no longer incorporated retroactivity. Retroactivity caused historical adjustments to caseload to account for clients who were found to be eligible for Medicaid for past months, thus increasing the count of persons eligible for Medicaid. Since most clients are eligible back to the date of their application, retroactivity adjustments assured that all months were accounted for. However, this caused variability in the caseload reports, as monthly caseload was adjusted for months, even years, after the month had ended. It also required special manually run reports to make these adjustments. Under the cash accounting system, a monthly caseload report is created from the Medicaid Management Information System (MMIS) and that caseload is considered final.

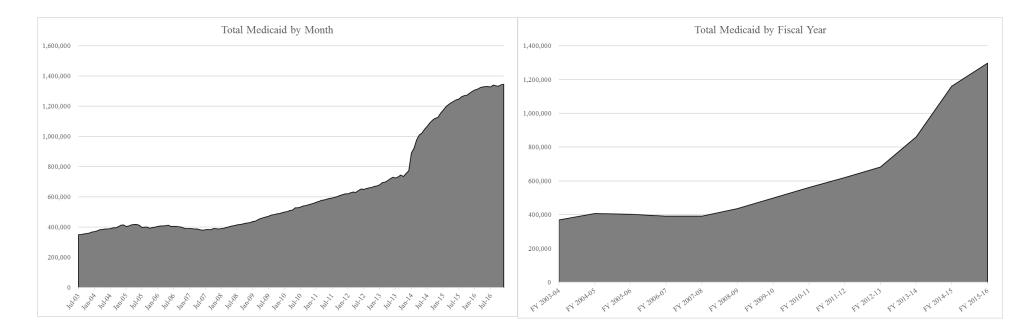
In addition to estimating the funding need for the Medical Services Premiums line item, Medicaid caseload is used to determine the funding need for the Medicaid Behavioral Health Community Programs. Comprehensive behavioral health services are available to eligible Medicaid clients. Thus, the Medicaid Behavioral Health caseload is the Medicaid caseload less Partial Dual Eligibles and Non-Citizens, which are not eligible for full Medicaid benefits. The following table displays a comparison of historical caseloads in Medicaid Medical Services Premiums and Behavioral Health.

	Medical Services	Less: Behavioral Health	Behavioral Health
Fiscal Year	Premiums Caseload	Ineligible Categories	Caseload
FY 2003-04	367,559	(14,635)	352,924
FY 2004-05	406,024	(14,755)	391,269
FY 2005-06	402,218	(17,304)	384,914
FY 2006-07	392,228	(18,109)	374,119
FY 2007-08	391,962	(18,405)	373,557
FY 2008-09	436,812	(19,062)	417,750
FY 2009-10	498,797	(19,612)	479,185
FY 2010-11	560,759	(20,303)	540,456
FY 2011-12	619,963	(21,641)	598,322
FY 2012-13	682,994	(23,890)	659,104
FY 2013-14	860,957	(25,859)	835,098
FY 2014-15	1,161,206	(30,767)	1,130,439
FY 2015-16	1,296,986	(35,234)	1,261,752

# **Recent Caseload History**

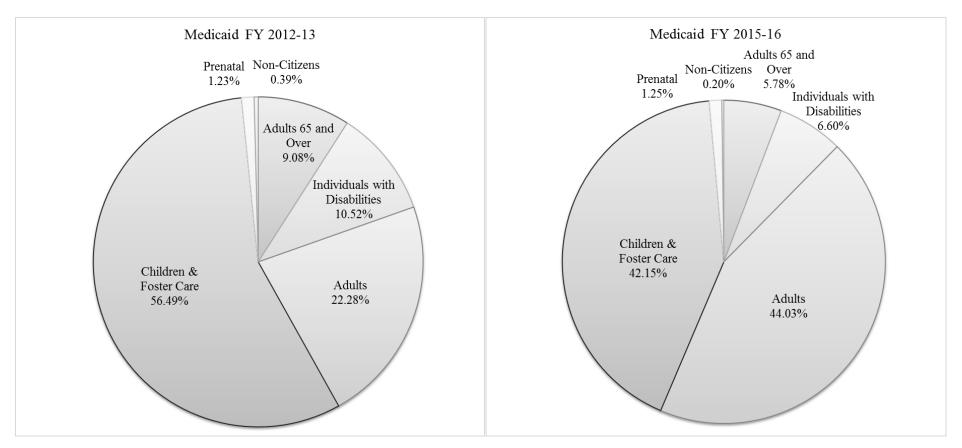
#### Total Medicaid Caseload

Exhibit B tabulates actual caseload figures and growth rates by eligibility category from FY 1997-98 to FY 2015-16. Projections for FY 2016-17 through FY 2018-19 are also presented in the table and will be discussed in the Categorical Projections section of this document. A graphical representation of aggregate Medicaid caseload history from FY 2003-04 is shown below. Total Medicaid caseload had an average yearly growth of 11.76% over the 5 years preceding FY 2013-14. As can be seen in the graph below, Medicaid expansion began in January 2014. The average monthly caseload for total Medicaid in FY 2013-14 increased by 26.06% from FY 2012-13. Overall, the caseload growth that is attributable to Medicaid expansion has been much greater than previously projected.



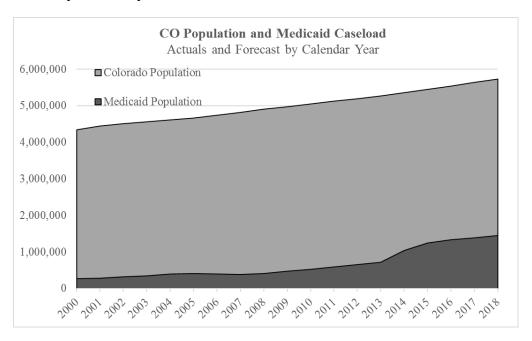
# Composition of Medicaid Caseload

Medicaid Expansion resulted in significant changes in the composition of Medicaid caseload, mainly for Medicaid Adults. The following charts show a side-by-side comparison of the Medicaid caseload by category as a percentage of the overall caseload for FY 2012-13 (pre-expansion) and FY 2015-16 (post-expansion). Medicaid adults have increased their share of caseload by more than 21 percentage points, an increase attributable to lifting the enrollment cap in MAGI Adults and expanding eligibility for adults to 133% FPL. Children and Foster Care has lost more than fourteen percentage points and is now less than half of the composition of Medicaid. Adults ages 65 and Over and Individuals with Disabilities have also lost a portion of their share. These declines in the proportion of caseload are not due to declines in the individual eligibilities themselves, rather they are due to the large increase in Medicaid Adults.



A number of factors influence Medicaid caseload trends, including population trends, in-state migration, age of the population, length of stay, economic conditions, and State and federal policy changes. Projecting annual caseload is complicated by the fact that each of these factors can contribute to categorical changes, some of which may be contradictory. For example, the State may enact legislation that removes clients from a Medicaid category who are aged 65 and older, while the population of adults aged 65 and older is increasing. Therefore, projections represent the *net effect* of what the Department expects will happen. Each factor and its expected impact on the Medicaid caseload are discussed below.

*Population* - Colorado's total population is estimated to have increased 7.8% from 2010 to 2015, while the population increase for the total US was 4.1%<sup>1</sup>. The Department of Local Affairs' State Demography Office forecasts that Colorado's population will increase a further 5.36% from 2015 to 2018<sup>2</sup>. As the overall population has grown, so too has Medicaid caseload. This positive correlation implies that if population is projected to grow in the future, Medicaid caseload may also increase. The graph below shows the Department of Local Affairs' forecast for Colorado's population with the Department's Medicaid Caseload forecast by calendar year.



When using population data to project caseload, the Department marries population subgroups to their appropriate Medicaid category. For example, when projecting caseload for MAGI Eligible Children, the Department uses population statistics for Colorado residents aged 0 to 18. By using subgroups instead of total population figures, the Department is able to capture subgroup specific trends.

*In-State Migration* - Like population, in-state migration is positively correlated with Medicaid caseload. As discussed above, Colorado's population from 2010 to 2015 grew at a faster rate than the population of the U.S. As more individuals move to Colorado from other states, Medicaid caseload is likely to increase. During economic downturns, people usually move from states with worse economic conditions to states with better conditions in search of jobs. Although Colorado experienced economic conditions in line with the overall conditions in the United States during the recent recession, net migration remained positive in 2010 at approximately 70,000<sup>3</sup>. An increase of 70,000 persons in a population of over 5.1 million may not be significant, but a positive migration rate means more people who could be eligible for Medicaid. According to 2010 estimates from the Census Bureau,

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<sup>&</sup>lt;sup>1</sup> http://www.census.gov/quickfacts/table/PST045215/00

<sup>&</sup>lt;sup>2</sup> Source: Department of Local Affairs, Demography Division; https://demography.dola.colorado.gov/births-deaths-migration/data/components-change/#components-of-change, select Colorado, years 2010-2018, and no grouping

<sup>&</sup>lt;sup>3</sup> Source: Department of Local Affairs, Demography Division

Colorado experienced the sixth highest migration rate in the United States.<sup>4</sup> Conversely, as the economy recovers, in-state migration is expected to increase. Net migration grew to an estimated 52,346 in 2006, overtaking natural increase (births minus deaths) as the major component of population growth. Though in-state migration is projected to decrease over the forecast period, the number of individuals moving into the State is expected to remain positive, buoyed by rates of unemployment and housing value deflation that are lower than the national average.

Age - The age of the population can provide some insight as to why Medicaid caseloads have been increasing. As the population ages, the demand for medical care increases. Generally, as individuals age, their health becomes more fragile and they are more likely to seek health care. From 2002 to 2012, Colorado's median age increased by 1.9 years, a 5.4% increase<sup>5</sup>. This may be the result of retirees moving to the State, increased longevity, or fewer births. Regardless of the reason, an aging population has a direct effect on the demand for medical services, though not necessarily Medicaid. According to data from the United States Census Bureau, Colorado had the 10<sup>th</sup> lowest median age in 2010 and the 4<sup>th</sup> lowest old-age dependency ratio in 2009 (defined as the population 65 and older as a percent of population 18 to 64) in the nation.<sup>6</sup> The population over 60 in Colorado has increased by 59.55% between 2002 and 2013, which is expected to cause an increase in the State's median age. Additionally, Colorado's old-age dependency ratio is projected to increase from 15.6 in 2000 to 24.6 in 2020, a 57.2% increase.<sup>7</sup> This growth is significantly higher than the national average, which is projected to increase by 34.8% over the same timeframe. This suggests that Colorado will be aging faster than the average state over the forecast period. Since 2009, Colorado has experienced increases in the eligibility categories that include older individuals, though the growth was not as high as population growth in the general population aged 60 and over. This may be the result of a healthier aging population and demographic factors, such as the elderly population working longer and some of the baby-boom generation not yet reaching retirement age. Below is a chart comparing population by age group for Colorado and the United States. The next page shows the population pyramid from the 2010 Census Summary.

	Population by Age Group: 2010									
	Total	Under 18	years	18 to 44 Years 45 to 64 Years		65 Years and Over		Median		
	Population	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Age
<b>United States</b>	308,745,538	74,181,467	24.0%	112,806,642	36.5%	81,489,445	26.4%	40,267,984	13.0%	37.2
Colorado	5,029,196	1,225,609	24.4%	1,913,620	38.1%	1,340,342	26.7%	549,625	10.9%	36.1

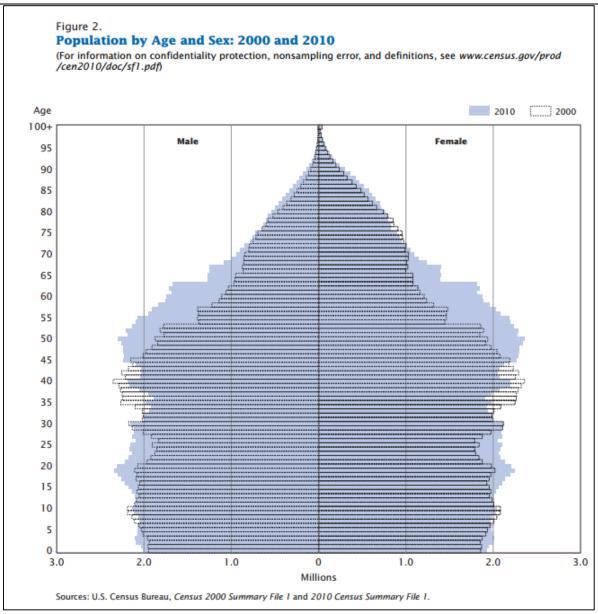
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<sup>&</sup>lt;sup>4</sup> Source: 2010 American Community Survey <a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>

<sup>&</sup>lt;sup>5</sup> Source: Department of Local Affairs, Demography Division

<sup>&</sup>lt;sup>6</sup> Source: 2010 American Community Survey <a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>

<sup>&</sup>lt;sup>7</sup> Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005 <a href="http://www.census.gov/population/www/projections/index.html">http://www.census.gov/population/www/projections/index.html</a>



Length of Stay- Medicaid caseload is not only affected by the number of individuals served but also the length of time they remain in the program. The calculation used in the past for length of stay only considered enrollment in a given year in isolation, and did not account for clients that have eligibility that overlaps multiple fiscal years due to the timing of their eligibility determination. The Department has refined this analysis to account for the clients with a length of stay lasting longer than a fiscal year to provide a more accurate picture of the amount of time that individuals are enrolled in Medicaid. The table below shows the average length of stay in months, as well as the percent of clients that stay on Medicaid for longer than one year. The calculation for FY 2014-15 (shaded) may not be complete due to run-out and these averages could increase as more data is accrued. Between FY 2012-13 and FY 2013-14, average length of stay for MAGI Parents/Caretakers to 68% FPL increased from around 13 months to nearly 16 months and average length of stay for MAGI Eligible Children increased from nearly 17 months to just under 18 months.

	Average Length of Stay in Months by Eligibility													
		Adults 65 and Older	Disabled Adults 60 to 64	Disabled Individuals to 59	Disabled Buy-In	MAGI Parents/ Caretakers to 68% FPL	MAGI Parents/ Caretakers to 133% FPL	MAGI Adults	Breast and Cervical Cancer Program	Eligible Children	Foster Care	Baby Care Program Adults	Non- Citizens	Partial Dual- Eligibles
2010-11	Avg LOS Mo's	54.82	50.16	66.28	-	14.08	12.31	-	32.44	16.63	43.91	10.49	6.57	47.04
FY 20	% > 12 Mo's	90.82%	90.52%	93.20%	-	53.18%	48.42%	-	81.99%	67.07%	87.18%	25.16%	1.51%	89.86%
2011-12	Avg LOS Mo's	51.03	44.97	61.25	13.52	14.45	13.90	10.11	30.99	17.76	42.67	10.66	6.38	42.71
FY 20	% > 12 Mo's	90.93%	90.11%	93.11%	32.61%	58.37%	62.77%	39.27%	83.96%	76.42%	88.94%	27.06%	1.35%	90.40%
FY 2012-13	Avg LOS Mo's	43.32	35.46	55.11	12.78	13.90	12.50	9.28	25.99	16.62	37.29	9.07	5.84	34.46
FY 20	% > 12 Mo's	86.05%	86.40%	90.21%	30.65%	53.55%	48.93%	32.93%	70.65%	68.90%	90.21%	16.16%	0.92%	78.52%
13-14	Avg LOS Mo's	35.28	33.14	45.31	15.94	15.78	6.95	9.86	29.02	17.84	35.91	10.29	5.74	32.28
FY 2013-14	% > 12 Mo's	85.48%	86.30%	90.68%	47.09%	63.63%	12.00%	19.45%	75.08%	72.47%	88.48%	24.44%	0.76%	82.42%
2014-15	Avg LOS Mo's	14.31	16.41	16.49	11.85	13.44	19.67	11.28	12.18	14.05	31.21	10.81	5.59	13.67
FY 20	% > 12 Mo's	80.77%	87.53%	90.23%	39.66%	72.19%	80.95%	20.04%	73.58%	79.88%	93.31%	33.37%	1.59%	81.51%

Economic Conditions - Economic indicators partially explain why some Medicaid caseload trends occur. Since Medicaid is a needs-based program where clients must meet income limits, it follows that caseload for families and children should be countercyclical to economic conditions. For example, as the state experiences recessionary conditions, the Medicaid caseload will increase. After the recession that ended in the early 1990s, Colorado enjoyed almost ten years of economic expansion. The terror attacks on the United States in 2001 combined with the bursting of the stock market bubble in late 2000 brought that expansion to a halt. For the first time in more than a decade, Colorado experienced significant job losses coupled with falling wages. In mid-2003, the Colorado economy hit bottom after the decline that started in early 2001. Due to seasonal fluctuations and wide confidence intervals for over the month changes, employment data is best analyzed by comparing the same month for different years. The first post-recession over-the-year gain in non-agricultural employment occurred in March of 2004. The State officially entered an expansionary period in early 2006, as employment surpassed the late 2000 peak. The recovery period lasted 30 months, one of the longest on record. Employment began to soften in October 2008, when 4,600 jobs were shed over the year. The State experienced over-the-year job losses for two years and the annual contractions appear to have peaked in September 2009, when job losses numbered 128,400 (5.5%) over the year. The State has seen very moderate over-the-year employment increases as of September 2010. As of June 2016, the over-the-year jobs gain was estimated to be 64,800, or 2.55%. The unemployment rate for the US in 2015 was estimated at 5.3% while Colorado's unemployment rate for the same year was 3.9%.

The table that follows shows historical and projected (shaded) wage and salary income, non-agricultural employment, and unemployment rates. 10

Year	Wage and Salary Income (billions)	Non-Agricultural Employment	Unemployment Rate
2007	\$ 112.5	2,331,300	3.8%
2008	\$ 116.7	2,350,300	4.8%
2009	\$ 112.3	2,245,600	8.1%
2010	\$ 113.8	2,222,300	8.7%
2011	\$ 118.6	2,258,600	8.4%
2012	\$ 125.0	2,313,000	7.9%
2013	\$ 129.5	2,381,900	6.8%
2014	\$ 138.7	2,464,900	5.0%
2015	\$ 146.4	2,539,900	3.9%
2016	\$ 154.2	2,603,400	3.3%
2017	\$ 162.5	2,668,400	3.6%
2018	\$ 171.4	2,732,500	3.8%

The timing of an economic cycle is important in estimating the impact on the Medicaid caseload, excluding elderly eligibilities and clients with disabilities. As the economy recovers from a downturn, workers need to find jobs in order to withdraw from the Medicaid rolls. Jobs that primarily affect family and children Medicaid populations are hourly and concentrated in the service industry. These employment types are often the last to

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<sup>&</sup>lt;sup>8</sup> Source: United States Department of Labor, Bureau of Labor Statistics, Current Employment Statistics <a href="http://www.bls.gov/data/">http://www.bls.gov/data/</a>

<sup>&</sup>lt;sup>9</sup> Source: http://www.bls.gov/cps/

<sup>&</sup>lt;sup>10</sup> Source: Office of State Planning and Budgeting, June 2016 Economic and Fiscal Review, page 65

benefit from improving economic conditions. Therefore, any economic impact on the Medicaid caseload will have a lagged effect. Second, as workers find jobs they do not instantaneously lose their Medicaid eligibility. Since 1990, states have been federally required to provide Transitional Medical Assistance (known as Transitional Medicaid) benefits for up to one year to families who lost eligibility because of increased income due to employment. This policy was directed at clients who potentially might turn down employment for fear of losing their Medicaid benefits. To be eligible for Transitional Medicaid, a client must have been eligible in at least three of the preceding six months, though states may elect to reduce this requirement to fewer than three months. Clients may receive Transitional Medicaid as long as their income is below 185% of the federal poverty level, provided that the proper income reporting requirements are followed. Another small group of clients are eligible for Transitional Medicaid services that would otherwise lose their Medicaid benefits due to child or spousal support payments. Families in this group receive a four-month extension. In the past, this program has been set to expire many times. With the passage of H.R.2 "Medicare Access and CHIP Reauthorization Act of 2015 on April 16, 2015, transitional Medicaid was made permanent. As illustrated in the following table, the average number of adults and children on Transitional Medicaid increased dramatically in FY 2004-05. The Department suspects that the high growth in FY 2004-05 and FY 2005-06 may be partially related to large monthly increases that occurred around the implementation of the Colorado Benefits Management System. Monthly caseload declined between December 2005 and June 2008, but caseload increased throughout FY 2008-09 and FY 2009-10. Transitional Medicaid increased again in FY 2013-14 and FY 2014-15 for adults, which is likely due to both expansion and an improving economy.

While the economy is projected to continue improving, the Department does not anticipate declines in caseload. The Affordable Care Act expands State-provided medical coverage, implements an insurance mandate, and changes the way poverty levels are measured (MAGI conversion). Despite the improving economy, these policy changes are resulting in aggressive caseload growth. As discussed above, many of the expansion groups in Medicaid caseload grew much faster than originally predicted. More details will be presented in the Categorical Projections section. The improving economy is better demonstrated in the average monthly caseload that is on Transitional Medicaid, see the chart on the next page.

The Department implemented two changes that affected Transitional Medicaid in FY 2009-10. First, section 5004 of the American Recovery and Reinvestment Act of 2009 (ARRA) included options for states to modify eligibility for Transitional Medicaid, including waiving the requirement that the family was eligible for Medicaid in at least three of the preceding six months and extending families' eligibility to 12 months, rather than six months followed by a second six-month period that is dependent upon reporting, income, and technical eligibility requirements. Colorado elected the option to provide 12 months of Transitional Medicaid coverage, which was effective October 1, 2010. Finding #58a of the State of Colorado Statewide Single Audit for the Fiscal Year ending June 30, 2009 stated that the Department should address an issue in the Colorado Benefits Management System that prevented the prompt termination of Transitional Medicaid benefits if the proper reporting, income, and technical eligibility requirements were not met. The Department's response indicated that it was researching whether it would be more efficient for both county eligibility staff and clients, as well as from a fiscal standpoint, to grant 12 months of Transitional Medicaid eligibility with no reporting requirements. The Department determined that this was indeed more efficient and decided in 2010 to go forward with this option. Second, when the Department implemented the eligibility expansion for Medicaid Parents/Caretakers to 100% of the federal poverty level, the Department made modifications to the Colorado Benefits Management System to increase eligibility for all Family Medicaid clients to 100% of the federal poverty level. Previously, the Expansion Adults to 60% of the federal poverty level (FPL) group had its own eligibility requirements within Family Medicaid, which the Centers for Medicare and Medicaid Services indicated to the Department was incorrect. Prior to Medicaid expansion on January 2014, income eligibility for Transitional Medicaid spanned 101% to 185% FPL rather than 26% to 185% FPL, the Aid to Families with Dependent Children (AFDC) level. However, Transitional Medicaid caseload has steadily increased since this level shift, as is reflected in the table below. The number of adults on Transitional Medicaid nearly doubled in FY 2013-14 and more than doubled in FY 2014-15. The Department believes this is due to the MAGI conversion and the

mass update that was completed in March 2014. The MAGI conversion was implemented in October 2013 and changed the income determination for certain populations, including parents/caretakers. The Department ran a systems update in March 2014 to redetermine all clients under the MAGI rules. As clients' income level changed with the new MAGI determination, many parents/caretakers experienced an increase in measured income and were then identified as eligible for transitional Medicaid. This similar increase was not identified in children's categories because of the implementation of continuous eligibility for children. Adult clients eligible for Transitional Medicaid remain in the MAGI Parents/Caretakers to 68% FPL category rather than transitioning to expansion categories, when their FPL is at or below 133%.

	Average Number of Eligible	Average Number of Parents/
Fiscal Year	Children on Transitional Medicaid	Caretakers on Transitional Medicaid
FY 2002-03	7,645	4,689
FY 2003-04	7,349	4,709
FY 2004-05	10,776	6,586
FY 2005-06	16,749	10,745
FY 2006-07	16,065	9,968
FY 2007-08	13,000	7,778
FY 2008-09	13,489	7,905
FY 2009-10	13,582	8,099
FY 2010-11	11,042	6,173
FY 2011-12	21,311	11,171
FY 2012-13	16,544	8,643
FY 2013-14	16,335	16,668
FY 2014-15	4,969	34,001
FY 2015-16	12,451	29,329

*Policy Changes* - State and federal policy decisions can alter the Medicaid caseload. The following list briefly describes major State and federal policy changes that have affected Medicaid eligibility and, therefore, caseload. This list is not meant to be comprehensive in nature but a summary of major changes affecting eligibility since 2000.

- Breast and Cervical Cancer Prevention and Treatment Act of 2000, Public Law 106-354: Established a new group of eligibility for women under 65 who have been screened under the Centers for Disease Control and Prevention Board and need treatment for either diagnosis. Colorado implemented this optional eligibility group in July 2002 pursuant to SB 01S2-012.
- Medicare Prescription Drug, Improvement, and Modernization Act of 2003: This act causes more potential beneficiaries to be screened for Medicaid when they apply for this Medicare benefit.
- Presumptive eligibility for Medicaid pregnant women was discontinued on September 1, 2004. It was re-established by HB 05-1262 on July 1, 2005.
- HB 05-1262, the Tobacco Tax bill: This bill provided funding for the removal of the Medicaid asset test, the expansion of the income guideline used to establish eligibility for parents of children eligible for either Medicaid or the Children's Basic Health Plan to 60% of the federal poverty level (known as Expansion Adults to 60% FPL), and to expand the number of children enrolled in the Home- and Community-Based Services and the Children's Extensive Support Waiver.
- Deficit Reduction Act of 2005: This Act contained provisions related to premiums and cost sharing, benefits, and asset transfers that will have implications for Medicaid beneficiaries. In addition, the Deficit Reduction Act contained a provision requiring States to obtain satisfactory documentary evidence of citizenship and identity for all Medicaid applicants who have declared that they are citizens or nationals of the United States, with exemptions for individuals that are eligible for Medicaid and entitled to or enrolled in Medicare and those eligible for Medicaid by virtue of receiving Supplemental Security Income benefits.
- SB 07-211: Established presumptive eligibility for Medicaid children.
- HB 09-1293: The Colorado Health Care Affordability Act of 2009, authorizes the Department to collect hospital provider fees for the purpose of obtaining federal financial participation for the State's medical assistance programs and using the combined funds to: 1) increase reimbursement to hospitals for providing medical care under the medical assistance program and the Colorado Indigent Care Program; 2) increase the number of persons covered by public medical assistance; and 3) pay the administrative costs to the Department in implementing and administering the program. Populations that receive Hospital Provider Fee funding are disabled buy-in, adults without dependent children, and expansion adults 60%-133%. HB 09-1293 also established continuous eligibility for twelve months for children in Medicaid.
- HB 09-1353: Expands Medicaid eligibility to pregnant women who are legal permanent residents that have been in the country for less than 5 years.
- SB 11-008: Increases Medicaid eligibility for children from 6 through 18 years of age to 133% FPL beginning in January 2013 (142% FPL after MAGI disregards in October 2013). These clients are identified separately in the JBC monthly report and in the caseload forecast. They are the clients that are Medicaid eligible children between the ages of 6 and 18, FPL within 108% and 142%, and have no other insurance. These clients receive the CHP+ enhanced Federal match.
- SB 11-250: Increases Medicaid eligibility for pregnant women from 142% FPL to 185% FPL beginning in January 2013 (195% FPL after MAGI disregards in October 2013). These clients are identified separately in the JBC monthly report and in the caseload forecast. They are the clients that are Medicaid eligible pregnant adults that are within 142% FPL and 195% FPL and have no other insurance. These clients receive the CHP+ enhanced Federal match.
- SB 13-200: Increases Medicaid eligibility for expansion adults from 100% FPL to 133% FPL and lifts the enrollment cap on MAGI Adults.

- Continuous eligibility for Medicaid Eligible Children and CHP+ Children was implemented March 2014. Clients on Medicaid or CHP+ that are determined over the income threshold will have an additional 12 months of eligibility before losing benefits. This reduces churn between Medicaid and CHP+ as well as the client's ability to maintain continuous medical coverage as they churn from Medicaid or CHP+ into the Marketplace. This change results in an increased length of stay for MAGI Eligible Children and SB 11-008 Eligible Children.
- HB 14-1045: Extends funding for the Breast and Cervical Cancer Program through FY 2018-19.
- HB 14-1252: Increases the system capacity for home- and community-based intellectual and developmental disabilities programs, services, and supports.
- Annualization of income began July 1, 2016 and allows individuals with seasonal fluctuations in income to remain eligible throughout the year so long as their income, annualized throughout the year, meets Medicaid qualification requirements.
- The age range for screening and treatment of cervical cancer under the Breast and Cervical Cancer Program will expand to 21 through 64, from 40 through 64, in January 2017, based on the Department of Public Health and Environment's FY 2016-17 R-04 "Cervical Cancer Eligibility Expansion" request.
- HB 16-1321: Allows for a Medicaid Buy-In option for Supported Living Services waiver (under the Office of Community Living) and the Spinal Cord Injury and Brain Injury waivers under Medical Services Premiums, beginning in FY 2017-18.

Oftentimes, a forecast cannot instantaneously incorporate policy changes even with the use of dummy or indicator variables. When this occurs, adjustments are made to the forecast off-line. Detailed accountings of off-line adjustments are in Exhibit B, page EB-2.

Under Medicaid regulations before January 2014, the rules for counting income varied from state to state and differed based on the category through which an individual was eligible for the program. For example, Medicaid allowed applicants to disregard some child support payments and the first \$90 of earned income, and to deduct certain childcare expenses from income when determining eligibility for benefits. States also had the flexibility to disregard additional income and deduct other expenses, and a number of states used this authority to expand Medicaid eligibility. States' use of deductions and income disregards had the effect of increasing income eligibility standards for many families, but they also resulted in a somewhat more complex application and renewal process. Different income and household counting rules for federal CHIP programs, which often do not align with Medicaid rules, exacerbated this process. Pursuant to the federal Patient Protection and Affordable Care Act of 2010 (ACA), eligibility for Family Medicaid, CHIP and premium subsidies to purchase coverage in health insurance exchanges (the Colorado Health Benefit Exchange, or COHBE, in Colorado) are determined using the Modified Adjusted Gross Income (MAGI), beginning January 1, 2014. MAGI is adjusted gross income as determined under the federal income tax, plus various income amounts and adjustments, and is calculated for the household, defined as the tax filing unit. The family's assets are not considered in determining eligibility, and a standard 5% of the federal poverty level disregard is applied. The new rules also changed how family size is calculated and how household income is defined. Previously under Medicaid and CHIP programs, states took different approaches to determine family size and which family members' income to count depending on who in the family applied for benefits. Under the new rules, however, family size and household income are based on the tax filing unit. All individuals claimed as a dependent on a taxpayer's return are included in determining that taxpayer's family size. These new income eligibility rules generally apply to all children (except foster children) who qualify for Medicaid and to all adults under age 65. The health reform law does not change Medicaid eligibility rules for beneficiaries who are 65 or older or those in eligibility categories based on disability, though those who qualify for Medicaid as an individual with disabilities may be determined with the new income eligibility rules temporarily until their disability determination has been completed.

The transition to MAGI resulted in standardization of the definition and measurement of income, both across states and programs. This resulted in streamlined eligibility determinations that are based solely on national tax filing standards rather than disparate methodologies. For example, in Colorado, Medicaid applied a mandatory minimum disregard to earnings, whereas CHP+ did not, and CHP+ disregards any income earned by a child in the household, whereas Medicaid may count the child's income depending on the family circumstance.

In addition, Medicaid and CHP+ defined the family unit differently. For Medicaid, the "family" was determined similarly to the "nuclear" approach. This would include a spouse, parents, and any dependent children in the home. For CHP+, the "family" was defined as all related family members in the household that receive at least 50% of their financial support from the household.

For example, suppose a family applied for coverage for a child in a household with a married couple, the dependent child, and a grandmother, and annual household income was \$25,000. Under the Medicaid rules prior to October 2013, the grandmother was not counted in the household; therefore, the household size was three and the FPL of the child was approximately 135%, making the family over-income for Medicaid eligibility. Under the CHP+ rules prior to October 2013, the grandmother was counted in the household; therefore, the household size was four and the FPL of the child was approximately 112% and the child was eligible for CHP+.

As can be seen in the example above, these factors led to individuals enrolled in CHP+ that appear to meet Medicaid income eligibility. In FY 2011-12, approximately 43% of children enrolled in CHP+ had income below 133% FPL and 67% of pregnant women had income below 185% FPL. Under the streamlined income and household counting rules of MAGI, there should no longer be any clients in CHP+ with income below 133% FPL (142% FPL after MAGI disregards in October 2013) for children and 185% FPL (195% FPL after MAGI disregards in October 2013) for pregnant women, and clients should have transitioned from CHP+ to Medicaid. The Department included a bottom-line adjustment to reflect this change in the February 2014 forecast. The Department believes that the transition due to MAGI is complete and no longer includes this as a bottom line adjustment.

The transition to MAGI not only caused movement of clients from CHP+ to Medicaid, but also resulted in significant movement within the MAGI Parents/Caretakers eligibility groups in Medicaid. After the implementation of MAGI in October 2013, a large number of MAGI Parents/Caretakers 69% to 133% FPL moved to the lower FPL category MAGI Parents/Caretakers to 68% FPL. This is important as these categories have differing sources of state funding as well as federal medical assistance percentages (FMAP); the MAGI Parents/Caretakers to 68% FPL category is funded with General Fund and Hospital Provider Fee at the standard FMAP, whereas the MAGI Parents/Caretakers 69% to 133% FPL category is currently eligible for the enhanced FMAP under the federal ACA, with any State share funded with Hospital Provider Fee. This shift was accounted for as a bottom line adjustment, with a positive impact to the MAGI Parents/Caretakers to 68% FPL and a negative impact to the MAGI Parents/Caretakers 69% to 133% FPL. The sum of these two adjustments was equal to zero to show the net movement between the two categories. Such movement was included in the February 2014 forecast, but not of the same magnitude. The Department was aware of the movement, but did not believe it was entirely accurate due to known issues with the available data. A systems fix was scheduled for March 2014 and the Department believed that the majority of the movement would revert after the systems fix went into place. Clients did not return to their original categories after March 2014. The Department included the full effect of this shifting between categories in the November 2014 forecast. This change resulted in a large increase to the forecast for MAGI Parents/Caretakers to 68% FPL. The Department believes that this is now complete and no longer includes this as a bottom line adjustment.

There was also an ACA-related adjustment to the Foster Care eligibility type. Pursuant to the ACA, eligibility for children enrolled in Medicaid that turned 21 while in foster care was increased to age 26 in January 2014. This expansion was mandatory and was not subject to the Supreme Court of the United States ruling, which found the Medicaid expansion unconstitutionally coercive of states. The Department included a bottom-line adjustment Page MC-17

to account for the eligibility increase from age 21 to age 26 beginning January 1, 2014. The Department had predicted an average monthly growth in FY 2013-14 of 76 due to increasing the age from 21 to 26. By June 2016, the Department identified 1,643 clients in the Foster Care eligibility that were over age 21. The average monthly caseload in FY 2015-16 attributable to this expansion was 1,668. As enough time has passed since January 2014, the Department can now include the data of clients over age 21 in the technical forecast and is therefore no longer including a bottom-line adjustment for this expansion, beginning with the November 2016 forecast.

Caseload decreased from FY 2004-05 through FY 2007-08, resulting in a decline of 14,062, or 3.46%, between these fiscal years. The Department believes that improving economic conditions were the driving factor in this decrease, as consistent monthly declines occurred in MAGI Parents/Caretakers and MAGI Eligible Children, which are expected to be most affected by the economy. This trend reversed as of the second half of FY 2007-08, when the Eligible Children caseload started to show significant monthly increases. Strong increases continued in Medicaid in FY 2008-09, FY 2009-10, FY 2010-11, FY 2011-12, and FY 2012-13, with annual growth of 11.44%, 14.19%, 12.42%, 10.56%, and 10.17% respectively. With Medicaid expansion beginning in January 2014, the second half of FY 2013-14, caseload increased by 26.06% between FY 2012-13 and FY 2013-14 and 34.87% between FY 2013-14 and FY 2014-15. The increase continued in FY 2015-16, but at a lower rate, at 11.70%. The Department is forecasting Medicaid caseload to continue to increase by 4.33% in FY 2016-17 to 1,353,070. In FY 2017-18 and FY 2018-19, the trends are projected to be 4.97% and 3.65% respectively. Medicaid caseload is expected to increase at a decreasing rate as the expansionary period comes to an end and the economy continues to improve. The following table shows actual and projected aggregate Medicaid caseload from FY 2005-06 through FY 2018-19.

Fiscal Year	Medicaid Caseload	<b>Growth Rate</b>	Level Growth
FY 2005-06	402,218	-0.94%	(3,806)
FY 2006-07	392,228	-2.48%	(9,990)
FY 2007-08	391,962	-0.07%	(266)
FY 2008-09	436,812	11.44%	44,850
FY 2009-10	498,797	14.19%	61,985
FY 2010-11	560,759	12.42%	61,962
FY 2011-12	619,963	10.56%	59,204
FY 2012-13	682,994	10.17%	63,031
FY 2013-14	860,957	26.06%	177,963
FY 2014-15	1,161,206	34.87%	300,249
FY 2015-16	1,296,986	11.70%	135,829
FY 2016-17 Projection	1,353,070	4.33%	56,084
FY 2017-18 Projection	1,420,267	4.97%	67,197
FY 2018-19 Projection	1,472,119	3.65%	51,852

#### FORECAST MODELS

The Department's caseload projections utilize statistical forecasting methodologies to predict Medicaid caseload by eligibility category. Historical monthly caseload data from July 1993 to December 2016 and historical and forecasted economic data (revised in June 2016 with some updates in December 2016) and demographic data (revised in June 2016) are used. The following forecasting models are used in this forecast: trend and monthly seasonal dummy variables, ARIMA models, trend stationary, difference stationary, regression analysis with explanatory variables, and vector auto regression models. In the past, the software used by the Department for developing trend and regression forecasts was *Forecast Pro XE*. The Department is now using *EViews* 7.

#### Trend and Seasonality Model

Medicaid caseload is a non-stationary series with a positive trend and many of the categories experience some level of seasonality. One of the models used incorporates a time trend and monthly seasonal dummy variables.

#### ARIMA Model

ARIMA models, also referred to as Box-Jenkins models, rely on the past behavior of the series being forecasted. Relying on the past behavior of a series mandates that a series be stationary. Most of the eligibilities in Medicaid caseload have a positive growth trend (non-stationary) and require differencing to be made stationary.

# Trend Stationary and Difference Stationary

Series that are stationary have a constant mean; caseload series frequently do not have this characteristic and often have a trending mean. Two popular models used for non-stationary series with a trending mean are trend stationary and difference stationary. The trend stationary model serves as an effective model if the series has a deterministic trend. The difference stationary model is useful when the trend is stochastic. Differencing the dependent variable gives a stationary series. The basic forms of the two models are listed below, where y is the dependent variable. Lags of the dependent variable are added to clear up serial correlation within the series.

- Trend Stationary:  $log(y) = c + trend + \varepsilon$
- Difference Stationary: differenced(log(y)) =  $c + \varepsilon$

# Regression Models

Regression analysis, unlike trend analysis, incorporates independent variables when making projections. For example, a regression equation may include the unemployment rate if the forecaster expects it to have an effect on the caseload for MAGI Parents/Caretakers. Statistically, the forecaster can test whether or not there is a relationship between independent variables and the caseload by constructing a correlation matrix. Variables that are highly correlated with the caseload are more likely to be predictive. Regression equations are useful in that they provide some insight into why the trend projection is increasing, decreasing, or static. Although regression equations help explain why trends occur, their value depends on the quality of the independent variables used. In order to project caseload, historical and forecasted values of the independent variables must be used. Therefore, the accuracy of the caseload forecast depends on the accuracy of the forecasted independent variables. The Department accessed the Colorado Department of Local Affairs' Demography Division's actual and forecasted values of different populations by age and the unemployment rate in June 2016 and used this information in the regression models.

# Vector Auto Regression Models (VARs)

The Department has frequently used regression analysis to forecast caseload. Regression analysis, as described above, incorporates independent variables when making projections. Regression analysis has the unfortunate requirement that the independent variables be exogenous to the dependent variable, or only allows the independent variable on the right-hand side of the equation to have an effect on the dependent variable on the left-hand side of the equation. This is unlikely in reality as most factors are interrelated and may affect each other simultaneously. Vector Auto Regression (VAR) models are simultaneous equations, allowing the different variables to affect each other equally. In other words, both variables are dependent and are able to change over time together in the forecast. The simultaneous process is better able to capture a long-term relationship between multiple variables and does not restrict one variable to the right hand side of the equation. 11 This can serve as a better reflection of reality than forcing the assumption that a variable is exogenous to Medicaid caseload.

# **Exponential Smoothing**

For over 30 years, Exponential Smoothing models have been used to forecast data within a variety of applications. Considered simplistic, Exponential Smoothing models extract trend and seasonal patterns from a time-series to predict a future stream of values. There are two types of Exponential Smoothing models that address trend and seasonality in time-series data: Holt and Winters. The Holt Exponential Smoothing model adjusts for longterm linear trend in data, while the Winters Exponential Smoothing model adjusts for both trend and seasonal components of data. Both Holt and Winters use recursive equations to determine the estimated parameters of the model, giving more weight to recent observations and exponentially smaller weight to historically distant observations. One advantage of this model is that it produces robust results with limited data sets. This is very useful Medicaid eligibility categories that have not been in existence for very long. While the Department has used this model in the past, the November 2016 forecast does not use exponential smoothing.

# **Model Selection**

After several different forecasts are produced, the Department normally chooses one for each category. Several statistics are produced to grade and compare the forecast models. The three statistics provided in the narrative are the Schwartz Info Criterion (SIC), Akaike Info Criterion (AIC), and the adjusted R<sup>2</sup>. The SIC and the AIC provide a means for model selection. Both statistics include a trade-off between the goodness of fit of the model and the complexity of the model by applying a penalty for using up degrees of freedom (adding independent variables). These measures encourage the use of simpler models. The closer the SIC or AIC are to negative infinity, the better the model. The adjusted R<sup>2</sup> measures the goodness of fit of the model in-sample; the closer the R<sup>2</sup> statistic is to one the better the goodness of fit. The calculation of the adjusted R<sup>2</sup> contains the most lenient penalty for using up the degrees of freedom in the model. It is important to note that this measure is not reliable when forecasting the differences of a series. When differencing a series to make it stationary, fitting a model becomes incredibly difficult and the R<sup>2</sup> value drops. This does not indicate a poor model; it is simply a result of differencing a series. For models where the dependent variable is differenced, the AIC and SIC prove much more useful for comparing different models than the R<sup>2</sup>. When selecting a model, the Department closely analyzes the historical data, possible future impacts like the predicted state of the economy, and the above-mentioned statistics.

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<sup>&</sup>lt;sup>11</sup> Sims, Chris "Macroeconomics and Reality." Econometrica. Volume. 48 No.1 (1980)

# **CATEGORICAL PROJECTIONS**

This next section details the caseload projections by eligibility category. For each category, the following are presented: a discussion of the category, statutory authority, model results, rationale for the forecast, and historical caseload and forecasts. FY 2018-19 projections are included for informational purposes.

#### Adults Over 65 (OAP-A)

Colorado automatically provides Medicaid coverage to individuals who receive Supplemental Security Income. Supplemental Security Income, authorized under Title XVI of the Social Security Act of 1965, is a federal cash assistance program for persons aged 65 and older, blind, or disabled. An individual must have income below the federal monthly maximum Supplemental Security Income limit and limited resources. The Supplemental Security Income adults aged 65 and older are included in this category. Also included are individuals aged 65 and older who meet the Medicaid resource and income requirements, but are not receiving Supplemental Security Income. In addition, states may extend coverage to individuals with incomes above the Supplemental Security Income limit and who meet the nursing home level of care. Referred to as 'Three-Hundred Percenters', these clients have incomes no more than three times the Supplemental Security Income maximum limit, and they meet the level of care to be in a nursing home.

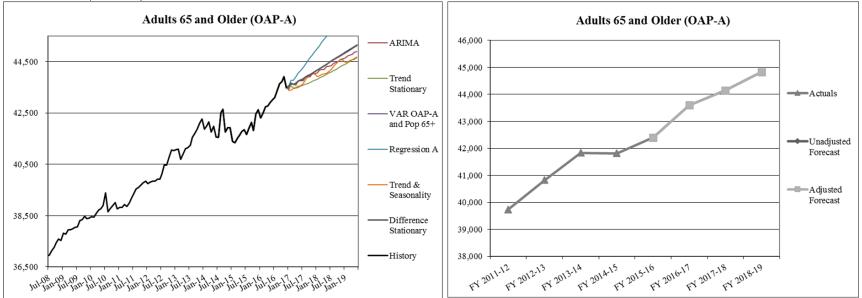
#### 25.5-5-101 (1), C.R.S.

- (f) Individuals receiving supplemental security income;
- (g) Individuals receiving mandatory state supplement, including but not limited to individuals receiving old age pensions;
- (h) Institutionalized individuals who were eligible for medical assistance in December 1973;
- (i) Individuals who would be eligible except for the increase in old-age, survivors, and disability insurance under P.L. 92-336;
- (j) Individuals who become ineligible for cash assistance as a result of old-age, survivors, and disability insurance cost-of-living increases after April 1977;

#### 25.5-5-201 (1), C.R.S.

- (b) Individuals who would be eligible for cash assistance except for their institutionalized status;
- (c) Individuals receiving home-and community-based services as specified in part 6 of this article;
- (f) Individuals receiving only optional state supplement;
- (g) Individuals in institutions who are eligible under a special income level. Colorado's program for citizens sixty-five years of age or older or physically disabled or blind, whose gross income does not exceed three hundred percent of the current federal supplemental security income benefit level, qualifies for federal funding under this provision;
- (j) Individuals who are qualified aliens and were or would have been eligible for supplemental security income as a result of a disability but are not eligible for such supplemental security income as a result of the passage of the federal "Personal Responsibility and Work Opportunity Reconciliation Act of 1996", Public Law 104-193;

# Adults 65 and Older (OAP-A): Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	OAP-A	Constant, Trend, Seasonal Dummy Variables	15.98	15.82	0.9722
ARIMA	D(OAP-A)	Constant, AR variables, MA variables	13.26	13.18	0.0744
Trend Stationary	LOG(OAP-A)	Constant, Trend, 4 lags of the dependent variable	-7.82	-7.9	0.9981
Difference Stationary	DLOG(OAP-A)	Constant, 3 lags of the dependent variable	-7.82	-7.87	0.0305
Regression A	OAP-A	Constant, CO population over 65, 1 lag of the dependent variable	13.28	13.2	0.9979
VAR OAP-A and Pop 65+			NA	NA	NA

		Adults 65 and Older: Moo	del Results1			
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	41,817	42,403	2.58%	43,497	1,094	4
ARIMA	41,817	42,403	2.79%	43,586	1,183	6
Trend Stationary	41,817	42,403	2.66%	43,531	1,128	4
Difference Stationary	41,817	42,403	2.82%	43,599	1,196	6
Regression A	41,817	42,403	3.08%	43,709	1,306	9
VAR OAP-A and Pop 65+	41,817	42,403	2.84%	43,607	1,204	6
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	42,403	43,497	1.02%	43,941	444	4
ARIMA	42,403	43,586	1.09%	44,061	475	4
Trend Stationary	42,403	43,531	0.63%	43,805	274	4
Difference Stationary	42,403	43,599	1.25%	44,144	545	5
Regression A	42,403	43,709	2.82%	44,942	1,233	12
VAR OAP-A and Pop 65+	42,403	43,607	1.24%	44,148	541	5
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	43,497	43,941	1.25%	44,490	549	4
ARIMA	43,586	44,061	1.30%	44,634	573	4
Trend Stationary	43,531	43,805	1.33%	44,388	583	5
Difference Stationary	43,599	44,144	1.56%	44,833	689	5
Regression A	43,709	44,942	3.16%	46,362	1,420	11
VAR OAP-A and Pop 65+	43,607	44,148	1.50%	44,810	662	

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### Adults 65 and Older (OAP-A): Trend Selections

FY 2016-17: 2.82% FY 2017-18: 1.25% FY 2018-19: 1.56%

#### Adults 65 and Older (OAP-A): Justifications

- Average monthly caseload in FY 2015-16 for Adults 65 and Older was 42,403. The December 2016 caseload was 43,481, 147 higher than the predicted December data point in the November 2016 request. For YTD FY 2016-17, caseload in this category grew at an average of 78 clients per month, with downward pressure from one data point (December 2016). Consequently, the Department increased the previous trends. The projected percent growth for FY 2016-17 is 2.82%.
- This population will be affected by the aging of the "baby boomers", defined by the U.S. Census Bureau as the generation born between 1946 and 1964. The Department believes that this population is beginning to see this increase and has selected strong growth trends for FY 2017-18 and FY 2018-19 to account for the expected baby boomers. A population pyramid is available for review on page MC-10.
- This population may be affected by provisions in the Deficit Reduction Act of 2005, notably sections 6011 (lengthening of look-back period), 6012 (treatment of annuities), 6014 (disqualification of individuals with substantial home equity), 6015 (reform of asset test rules). These provisions may decrease the long-term growth rates as fewer people may now be eligible due to these provisions.
- The graph above shows that growth has been strong since FY 2011-12. Historical growth rates are stable and tend to fluctuate between 1% and 2%. The Department suspects that the high growth rate in FY 2004-05 is due to the court order regarding the Colorado Benefits Management System. The Department speculates that the decline in FY 2006-07 may be indicative that the effects of the asset and annuities provisions in the Deficit Reduction Act was stronger than expected. The Department has seen strong growth in the Home- and Community-Based Services for the Elderly, Blind, and Disabled waiver. This eligibility group has seen a large increase in the number of clients who are not eligible for SSI or on a waiver. The Department believes this is related to caseload declines in the State-only Old Age Pension Health and Medical Care program, which were caused by the implementation of new requirements around Systematic Alien Verification for Entitlements (SAVE) to comply with HB 06S-1023 and Department regulations.

	Actuals	Monthly Change	% Change
Dec-14	41,927	-	
Jan-15	41,392	(535)	-1.28%
Feb-15	41,334	(58)	-0.14%
Mar-15	41,518	184	0.45%
Apr-15	41,621	103	0.25%
May-15	41,778	157	0.38%
Jun-15	41,849	71	0.17%
Jul-15	41,661	(188)	-0.45%
Aug-15	41,909	248	0.60%
Sep-15	42,134	225	0.54%
Oct-15	41,817	(317)	-0.75%
Nov-15	42,456	639	1.53%
Dec-15	42,628	172	0.41%
Jan-16	42,301	(327)	-0.77%
Feb-16	42,504	203	0.48%
Mar-16	42,733	229	0.54%
Apr-16	42,778	45	0.11%
May-16	42,900	122	0.29%
Jun-16	43,015	115	0.27%
Jul-16	43,104	89	0.21%
Aug-16	43,374	270	0.63%
Sep-16	43,633	259	0.60%
Oct-16	43,725	92	0.21%
Nov-16	43,913	188	0.43%
Dec-16	43,481	(432)	-0.98%

November 2016 Forecast	
Forecasted December 2016 Level	43,334

Base trend from December 2016 level						
FY 2016-17	43,510	2.61%	1,107			

Adults 65 and Older: Historical Caseload and Projections						
	Caseload	% Change	Level Change			
FY 2003-04	34,329	-	-			
FY 2004-05	35,780	4.23%	1,451			
FY 2005-06	36,207	1.19%	427			
FY 2006-07	35,888	-0.88%	(319)			
FY 2007-08	36,284	1.10%	396			
FY 2008-09	37,619	3.68%	1,335			
FY 2009-10	38,487	2.31%	868			
FY 2010-11	38,921	1.13%	434			
FY 2011-12	39,740	2.10%	819			
FY 2012-13	40,827	2.74%	1,087			
FY 2013-14	41,836	2.47%	1,009			
FY 2014-15	41,817	-0.05%	(19)	N	ovember 201	6 ]
FY 2015-16	42,403	1.40%	586	FY 2015-16	42,403	
FY 2016-17	43,599	2.82%	1,196	FY 2016-17	43,412	
FY 2017-18	44,144	1.25%	545	FY 2017-18	44,137	
FY 2018-19	44,833	1.56%	689	FY 2018-19	44,870	

Actuals				
	Monthly Change	% Change		
6-month average	78	0.18%		
12-month average	71	0.17%		
18-month average	91	0.21%		
24-month average	65	0.15%		

No	vember 201	6 Projection	1
FY 2015-16	42,403	1.40%	586
FY 2016-17	43,412	2.38%	1,009
FY 2017-18	44,137	1.67%	725
FY 2018-19	44,870	1.66%	733

Monthly Averag	e Growth Act	uals
FY 2010-11 1st Half	(22)	-0.05%
FY 2010-11 2nd Half	64	0.17%
FY 2010-11	21	0.06%
FY 2011-12 1st Half	115	0.29%
FY 2011-12 2nd Half	13	0.03%
FY 2011-12	64	0.16%
FY 2012-13 1st Half	185	0.46%
FY 2012-13 2nd Half	20	0.05%
FY 2012-13	103	0.25%
FY 2013-14 1st Half	185	0.45%
FY 2013-14 2nd Half	(117)	-0.28%
FY 2013-14	34	0.08%
FY 2014-15 1st Half	61	0.15%
FY 2014-15 2nd Half	(13)	-0.03%
FY 2014-15	24	0.06%
FY 2015-16 1st Half	130	0.31%
FY 2015-16 2nd Half	65	0.15%
FY 2015-16	97	0.23%

Monthly Average Growth Comparisons						
Paguast	Monthly	Change	Percent	Percent Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	53	78	0.12%	0.18%		
FY 2016-17 2nd Half	73	49	0.17%	0.11%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	48	N/A	0.11%		
FY 2016-17	63	63	0.15%	0.15%		
FY 2017-18 1st Half	57	56	0.13%	0.13%		
FY 2017-18 2nd Half	59	57	0.13%	0.13%		
FY 2017-18	58	57	0.13%	0.13%		
FY 2018-19 1st Half	62	57	0.14%	0.13%		
FY 2018-19 2nd Half	61	58	0.14%	0.13%		
FY 2018-19	61	58	0.14%	0.13%		

# Adults 60 to 64 with Disabilities (OAP-B)

Colorado automatically provides Medicaid coverage to individuals who receive Supplemental Security Income. Supplemental Security Income, authorized under Title XVI of the Social Security Act of 1965, is a federal cash assistance program for persons aged 65 and older, blind, or disabled. An individual must have income below the federal monthly maximum Supplemental Security Income limit and limited resources. Disabled adults aged 60 to 64 who are eligible for Supplemental Security Income are included in this category. In addition, states may extend coverage to individuals with incomes above the Supplemental Security Income limit, and who meet the nursing home level of care. Referred to as 'Three-Hundred Percenters', these clients have incomes no more than three times the Supplemental Security Income maximum limit, and they meet the level of care to be in a nursing home.

Quality control checks are completed from time to time to look for eligibility coding errors that commonly result in clients being misclassified between this Medicaid category and the State-only Old Age Pension Health and Medical Care program (non-Medicaid). Historical miscoding can make it difficult to forecast this Medicaid category as groups of individuals identified through this process may be abruptly moved in and out of this category.

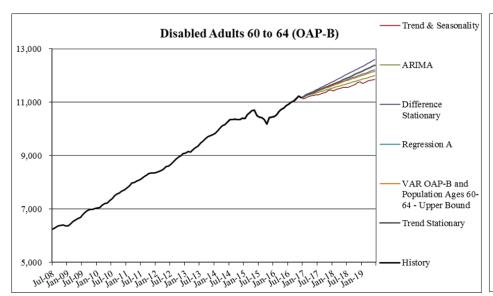
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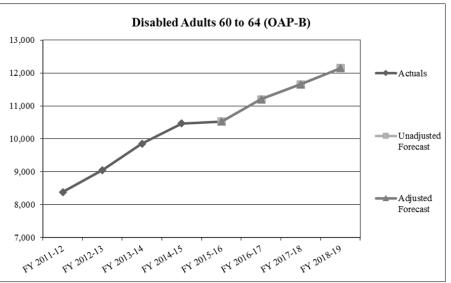
- (f) Individuals receiving supplemental security income;
- (g) Individuals receiving mandatory state supplement, including but not limited to individuals receiving old age pensions;
- (h) Institutionalized individuals who were eligible for medical assistance in December 1973;
- (i) Individuals who would be eligible except for the increase in old-age, survivors, and disability insurance under P.L. 92-336;
- (j) Individuals who become ineligible for cash assistance as a result of old-age, survivors, and disability insurance cost-of-living increases after April 1977;

# 25.5-5-201 (1), C.R.S.

- (b) Individuals who would be eligible for cash assistance except for their institutionalized status;
- (c) Individuals receiving home-and community-based services as specified in part 6 of this article;
- (f) Individuals receiving only optional state supplement;
- (g) Individuals in institutions who are eligible under a special income level. Colorado's program for citizens sixty-five years of age or older or physically disabled or blind, whose gross income does not exceed three hundred percent of the current federal supplemental security income benefit level, qualifies for federal funding under this provision;
- (j) Individuals who are qualified aliens and were or would have been eligible for supplemental security income as a result of a disability but are not eligible for such supplemental security income as a result of the passage of the federal "Personal Responsibility and Work Opportunity Reconciliation Act of 1996", Public Law 104-193;

# Adults 60 to 64 with Disabilities (OAP-B): Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	OAP-B	Constant, trend, and monthly seasonal variables	16.1	15.93	0.8969
ARIMA	dlog(OAP-B)	Constant, AR(1), AR(2), MA(1)	12.22	12.16	0.0926
Trend Stationary	log(OAP-B)	Constant, trend, and 3 lags on the dependent variable	-5.08	-5.14	0.9965
Difference Stationary	dlog(OAP-B)	Constant and 2 lags on the dependent variable	-5.1	-5.14	0.1078
Regression A	OAP-B	Constant, 3 lags on dependent variable, population age 60-64	12.16	12.09	0.9977
VAR OAP-B and Population Ages 60-64 - Upper Bound			NA	NA	NA

	Disal	oled Adults 60 to 64: Mod	el Results <sup>1</sup>			
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	10,466	10,529	5.90%	11,150	621	33
ARIMA	10,466	10,529	6.20%	11,182	653	39
Trend Stationary	10,466	10,529	6.37%	11,200	671	44
Difference Stationary	10,466	10,529	6.53%	11,217	688	49
Regression A	10,466	10,529	6.36%	11,199	670	44
VAR OAP-B and Population Ages 60-64 - Upper Bound	10,466	10,529	6.34%	11,197	668	43
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	10,529	11,150	2.57%	11,437	287	24
ARIMA	10,529	11,182	3.06%	11,524	342	27
Trend Stationary	10,529	11,200	4.10%	11,659	459	39
Difference Stationary	10,529	11,217	4.83%	11,759	542	46
Regression A	10,529	11,199	3.85%	11,630	431	35
VAR OAP-B and Population Ages 60-64 - Upper Bound	10,529	11,197	3.70%	11,611	414	33
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	11,150	11,437	2.54%	11,727	290	24
ARIMA	11,182	11,524	2.85%	11,852	328	27
Trend Stationary	11,200	11,659	4.24%	12,153	494	43
Difference Stationary	11,217	11,759	4.83%	12,327	568	48
Regression A	11,199	11,630	3.50%	12,037	407	33
VAR OAP-B and Population Ages 60-64 - Upper Bound	11,197	11,611	3.30%	11,994	383	31

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### Adults 60 to 64 with Disabilities (OAP-B): Trend Selections

FY 2016-17: 6.37% FY 2017-18: 4.10% FY 2018-19: 4.24%

# Adults 60 to 64 with Disabilities (OAP-B): Justifications

- Average monthly caseload in FY 2015-16 for Adults 60 to 64 with Disabilities was 10,529. The December 2016 caseload was 11,181, 114 over the predicted December caseload in the November 2016 request. After analyzing the most recent monthly data and the 2010 population pyramid from the 2010 Census (see page MC-10), the Department anticipates aggressive growth in the coming years for this population. The Department saw average monthly growth of 51 clients YTD in FY 2016-17, with downward pressure from the December 2016 data point. The Department has selected a trend in line with the average monthly growth witnessed in FY 2014-15.
- The Department selected a trend stationary model for this eligibility category, as the model produced a trend that is in line with historical actuals and anticipated aggressive growth going forward. This is the selected model for FY 2016-17 through FY 2018-19.
- Historically, this category has displayed consistently slow growth, with caseload increasing by an average of 12 clients per month between FY 2002-03 and FY 2007-08, excluding the level shift that occurred from the court order regarding the Colorado Benefits Management System. Growth from FY 2008-09 through FY 2010-11 averaged 52 per month. This population, like the Adults 65 and Older category, may be affected by the asset and annuities provisions in the Deficit Reduction Act of 2005, which would promote low growth. This category began to be affected by the baby-boom generation, defined by the U.S. Census Bureau as the generation born between 1946 and 1964, in calendar year 2006, which may have resulted in higher growth. Population growth in this age group was 10.8% in 2009 and 7.1% in 2010. The Department has seen strong growth in the Homeand Community-Based Services (HCBS) for the Elderly, Blind, and Disabled waiver over the last four years. There has also been a large increase in the number of clients in this eligibility type who are not eligible for Supplemental Security Income (SSI) or on a waiver. The Department believes this is related to caseload declines in the State-only Old Age Pension Health and Medical Care program, which were caused by the implementation of new requirements around Systematic Alien Verification for Entitlements (SAVE) to comply with HB 06S-1023 and Department regulations.

	Actuals	Monthly Change	% Change
Dec-14	10,404	-	-
Jan-15	10,395	(9)	-0.09%
Feb-15	10,532	137	1.32%
Mar-15	10,615	83	0.79%
Apr-15	10,690	75	0.71%
May-15	10,703	13	0.12%
Jun-15	10,503	(200)	-1.87%
Jul-15	10,437	(66)	-0.63%
Aug-15	10,423	(14)	-0.13%
Sep-15	10,348	(75)	-0.72%
Oct-15	10,190	(158)	-1.53%
Nov-15	10,429	239	2.35%
Dec-15	10,451	22	0.21%
Jan-16	10,462	11	0.11%
Feb-16	10,531	69	0.66%
Mar-16	10,664	133	1.26%
Apr-16	10,749	85	0.80%
May-16	10,788	39	0.36%
Jun-16	10,876	88	0.82%
Jul-16	10,931	55	0.51%
Aug-16	11,011	80	0.73%
Sep-16	11,039	28	0.25%
Oct-16	11,131	92	0.83%
Nov-16	11,233	102	0.92%
Dec-16	11,181	(52)	-0.46%

November 2016 Forecas	t
Forecasted December 2016 Level	11,067

Base trend from December 2016 level				
FY 2016-17	11,134	5.75%	605	

Disabled Adults 60 to 64: Historical Caseload and Projections						
	Caseload	% Change	Level Change			
FY 2003-04	5,548	1	-			
FY 2004-05	6,082	9.63%	534			
FY 2005-06	6,042	-0.66%	(40)			
FY 2006-07	6,059	0.28%	17			
FY 2007-08	6,146	1.44%	87			
FY 2008-09	6,447	4.90%	301			
FY 2009-10	7,049	9.34%	602			
FY 2010-11	7,767	10.19%	718			
FY 2011-12	8,383	7.93%	616			
FY 2012-13	9,051	7.97%	668			
FY 2013-14	9,853	8.86%	802			
FY 2014-15	10,466	6.22%	613	N	ovember 20	16 Proje
FY 2015-16	10,529	0.60%	63	FY 2015-16	10,529	0.6
FY 2016-17	11,200	6.37%	671	FY 2016-17	11,087	5.3
FY 2017-18	11,659	4.10%	459	FY 2017-18	11,535	4.0
FY 2018-19	12,153	4.24%	494	FY 2018-19	12,024	4.2

Actuals					
	Monthly	%			
	Change	Change			
6-month average	51	0.46%			
12-month average	61	0.57%			
18-month average	38	0.35%			
24-month average	32	0.30%			

November 2016 Projection					
FY 2015-16	10,529	0.60%	63		
FY 2016-17	11,087	5.30%	558		
FY 2017-18	11,535	4.04%	448		
FY 2018-19	12,024	4.24%	489		

Monthly Average Growth Actuals						
FY 2010-11 1st Half	66	0.88%				
FY 2010-11 2nd Half	61	0.78%				
FY 2010-11	64	0.83%				
FY 2011-12 1st Half	44	0.54%				
FY 2011-12 2nd Half	42	0.49%				
FY 2011-12	43	0.52%				
FY 2012-13 1st Half	79	0.89%				
FY 2012-13 2nd Half	47	0.51%				
FY 2012-13	63	0.70%				
FY 2013-14 1st Half	73	0.77%				
FY 2013-14 2nd Half	78	0.78%				
FY 2013-14	75	0.77%				
FY 2014-15 1st Half	24	0.23%				
FY 2014-15 2nd Half	17	0.16%				
FY 2014-15	20	0.20%				
FY 2015-16 1st Half	(9)	-0.08%				
FY 2015-16 2nd Half	71	0.67%				
FY 2015-16	31	0.30%				

Monthly Average Growth Comparisons					
Daguest	Monthly	Change	Percent Change		
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	32	51	0.29%	0.46%	
FY 2016-17 2nd Half	36	38	0.33%	0.34%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	17	N/A	0.16%	
FY 2016-17	34	44	0.31%	0.40%	
FY 2017-18 1st Half	38	38	0.33%	0.33%	
FY 2017-18 2nd Half	40	40	0.34%	0.34%	
FY 2017-18	39	39	0.34%	0.34%	
FY 2018-19 1st Half	41	42	0.35%	0.35%	
FY 2018-19 2nd Half	43	44	0.36%	0.36%	
FY 2018-19	42	43	0.35%	0.35%	

# **Individuals to 59 with Disabilities (AND/AB)**

Colorado automatically provides Medicaid coverage to individuals who receive Supplemental Security Income. Supplemental Security Income, authorized under Title XVI of the Social Security Act of 1965, is a federal cash assistance program for persons aged 65 and older, blind, or disabled. An individual must have income below the federal monthly maximum Supplemental Security Income limit and limited resources. This category includes the disabled portion of this group through age 59. These individuals: are blind, have a physical or mental impairment that keeps them from performing substantial work expected to last 12 months or result in death, or are children who have a marked and severe functional limitation expected to last 12 months or until death. Children were added to the Title XVI Act in 1972. In addition, states may extend coverage to individuals with incomes too high for Supplemental Security Income, and who meet the nursing facility level of care. Referred to as 'Three-Hundred Percenters', these clients have incomes no more than three times the Supplemental Security Income maximum limit, and they meet the level of care to be in a nursing home. Often, 'Three-Hundred Percenters' are enrolled in a Home- and Community-Based waiver program.

The 1990 outcome of the *Zebley v. Sullivan* lawsuit found that children could not be held to a higher standard of disability than adults. Zebley required that children's disability be measured using child-appropriate activities. As a result, the number of children determined to be disabled significantly increased until 1996. Welfare reform in 1996 tightened the disability criteria for children. An Individual Evaluation Plan from the public school system was no longer sufficient to verify disability, and children were required to have a physician document their level of functional impairment. However, any child receiving Supplemental Security Income before 1996 who lost his/her Supplemental Security Income benefits due to the new rules is still eligible for Medicaid. This category also includes disabled adult children age 18 and older who lost their Supplemental Security Income eligibility due to their parents receiving Social Security Administration benefits and disabled widows and widowers aged 50 to 64 who lost Supplemental Security Income due to the receipt of Social Security Administration benefits.

In July 2001, the Med-9 disability determination application process was disbanded due to federal requirements. This process let individuals under 65 who were seeking Medicaid coverage because of a disability experience an expeditious application process as compared to other applicants. By discontinuing the Med-9, clients underwent a more rigorous eligibility determination and caseload fell slightly.

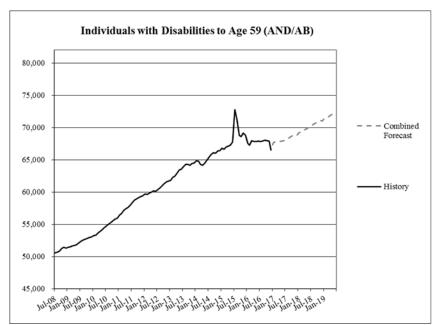
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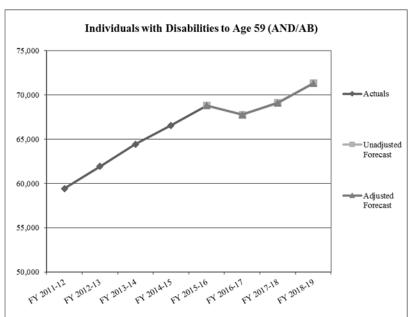
- (f) Individuals receiving supplemental security income;
- (g) Individuals receiving mandatory state supplement, including but not limited to individuals receiving old age pensions;
- (h) Institutionalized individuals who were eligible for medical assistance in December 1973;
- (i) Individuals who would be eligible except for the increase in old-age, survivors, and disability insurance under P.L. 92-336;
- (j) Individuals who become ineligible for cash assistance as a result of old-age, survivors, and disability insurance cost-of-living increases after April 1977;
- (k) Disabled widows or widowers fifty through sixty years of age who have become ineligible for federal supplemental security income or state supplementation as a result of becoming eligible for federal social security survivor's benefits, in accordance with the social security act, 42 U.S.C. sec. 1383c;

#### 25.5-5-201 (1), C.R.S.

- (b) Individuals who would be eligible for cash assistance except for their institutionalized status;
- (c) Individuals receiving home-and community-based services as specified in part 6 of this article;
- (f) Individuals receiving only optional state supplement;
- (g) Individuals in institutions who are eligible under a special income level. Colorado's program for citizens sixty-five years of age or older or physically disabled or blind, whose gross income does not exceed three hundred percent of the current federal supplemental security income benefit level, qualifies for federal funding under this provision;
- (j) Individuals who are qualified aliens and were or would have been eligible for supplemental security income as a result of a disability but are not eligible for such supplemental security income as a result of the passage of the federal "Personal Responsibility and Work Opportunity Reconciliation Act of 1996", Public Law 104-193;

# Individuals to 59 with Disabilities (AND/AB): Model Results





	Individuals with Disabilities to Age 59: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change <sup>2</sup>	
<b>Combined Forecast</b>	66,548	68,800	-1.51%	67,760	(1,040)	5	
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change <sup>2</sup>	
<b>Combined Forecast</b>	68,800	67,760	1.96%	69,085	1,325	176	
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change <sup>2</sup>	
<b>Combined Forecast</b>	67,760	69,085	3.19%	71,292	2,207	184	

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# Individuals to 59 with Disabilities (AND/AB): Trend Selections

FY 2016-17: -1.51% FY 2017-18: 1.96% FY 2018-19: 3.19%

# Individuals to 59 with Disabilities (AND/AB): Justifications

- Average monthly caseload in FY 2015-16 for AND/AB was 68,800. The December 2016 data point was 66,509, 2,424 below the predicted December caseload in the November 2016 request, largely driven by a large drop in caseload for this category in December, of about 1,400. The Department has selected models separately for the age group 0-18 and the age group 19-59. See those sections below for more details.
- HB 05-1262 expanded the number of children that can be enrolled in the Children's Home- and Community-Based Service (HCBS) Waiver Program and the Children's Extensive Support (CES) Waiver Program. The original expansion was 527 slots, which began to be filled in FY 2005-06. During the March 13, 2006 Figure Setting, the number of expansion slots funded under the Tobacco Tax bill was increased by 200 in the Children's HCBS Waiver Program and 30 in the CES Waiver Program. The Department received approval for the additional expansions from the Centers for Medicare and Medicaid Services in December 2006. All new expansion slots were filled by FY 2007-08.
- HB 16-1321 allows for a Medicaid Buy-In option for Supported Living Services waiver (under the Office of Community Living) and the Spinal Cord Injury and Brain Injury waivers under Medical Services Premiums, beginning in FY 2017-18. A negative bottom-line impact has been added to this category to account for clients transitioning from this category to Medicaid Buy-In, with the expanded option for increased employment.
- This population has historically been stable, having increased by approximately 5,000 clients between FY 1998-99 and FY 2007-08, or an average of 0.8% per year. However, growth rates in this population have increased significantly in the last four fiscal years, with caseload in HCBS waivers showing strong growth. In addition, over the last four years, the number of individuals eligible for Medicaid due to receipt of SSI has represented most of the growth in this eligibility group. The Department believes that this may be related to economic conditions in that individuals with work-limiting disabilities who were employed prior to the recession and have exhausted their federally-extended unemployment benefits may now be applying for Supplemental Security Income (SSI) if they cannot find work.

# FY 2017-18 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly Change	% Change
Dec-14	66,441	-	
Jan-15	66,758	317	0.48%
Feb-15	66,651	(107)	-0.16%
Mar-15	66,974	323	0.48%
Apr-15	67,110	136	0.20%
May-15	67,261	151	0.23%
Jun-15	67,726	465	0.69%
Jul-15	72,760	5,034	7.43%
Aug-15	71,167	(1,593)	-2.19%
Sep-15	68,765	(2,402)	-3.38%
Oct-15	68,576	(189)	-0.27%
Nov-15	69,113	537	0.78%
Dec-15	68,813	(300)	-0.43%
Jan-16	67,571	(1,242)	-1.80%
Feb-16	67,298	(273)	-0.40%
Mar-16	67,979	681	1.01%
Apr-16	67,828	(151)	-0.22%
May-16	67,842	14	0.02%
Jun-16	67,891	49	0.07%
Jul-16	67,836	(55)	-0.08%
Aug-16	67,906	70	0.10%
Sep-16	68,043	137	0.20%
Oct-16	67,951	(92)	-0.14%
Nov-16	67,914	(37)	-0.05%
Dec-16	66,509	(1,405)	-2.07%

November 2016 Forecast			
Forecasted December 2016 Level	68,933		

Ī	Base trend from December 2016 level					
ſ	FY 2016-17	67,101	-2.47%	(1,699)		

		Individua	als with Dis	ilities to age 59: Historical Caseload and Projections
	Caseload	% Change	Level Change	
FY 2003-04	46,789	-	-	
FY 2004-05	47,929	2.44%	1,140	
FY 2005-06	47,855	-0.15%	(74)	
FY 2006-07	48,799	1.97%	944	Actuals
FY 2007-08	49,933	2.32%	1,134	Monthly % Change Change
FY 2008-09	51,355	2.85%	1,422	6-month average (230) -0.34%
FY 2009-10	53,264	3.72%	1,909	12-month average (192) -0.28%
FY 2010-11	56,285	5.67%	3,021	18-month average (68) -0.08%
FY 2011-12	59,434	5.59%	3,149	24-month average 3 0.02%
FY 2012-13	61,920	4.18%	2,486	•
FY 2013-14	64,424	4.04%	2,504	
FY 2014-15	66,548	3.30%	2,124	November 2016 Projection Before Adjustments
FY 2015-16	68,800	3.38%	2,252	FY 2015-16 68,800 3.38% 2,252
FY 2016-17	67,760	-1.51%	(1,040)	FY 2016-17 69,028 0.33% 228
FY 2017-18	69,118	2.00%	1,358	FY 2017-18 70,636 2.33% 1,608
FY 2018-19	71,327	3.20%	2,209	FY 2018-19 71,754 1.58% 1,118

HB 16-1321 Medicaid Buy-In for SLS, SCI, and BI Waivers			
FY 2015-16	0		
FY 2016-17	0		
FY 2017-18	(33)		
FY 2018-19	(35)		

February 2017 Projections After Adjustments					
FY 2015-16	68,800	3.38%	2,252		
FY 2016-17	67,760	-1.51%	(1,040)		
FY 2017-18	69,085	1.96%	1,325		
FY 2018-19	71,292	3.19%	2,207		

Actuals				
	Monthly Change	% Change		
6-month average	(230)	-0.34%		
12-month average	(192)	-0.28%		
18-month average	(68)	-0.08%		
24-month average	3	0.02%		

November 2016 Projection Before Adjustments					
FY 2015-16	68,800	3.38%	2,252		
FY 2016-17	69,028	0.33%	228		
FY 2017-18	70,636	2.33%	1,608		
FY 2018-19	71,754	1.58%	1,118		

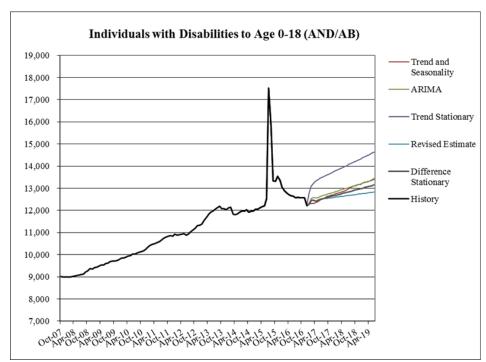
HB 16-1321 Medicaid Buy-In for SLS, SCI,				
and BI Waivers				
FY 2015-16	0			
FY 2016-17	0			
FY 2017-18	(33)			
FY 2018-19	(35)			

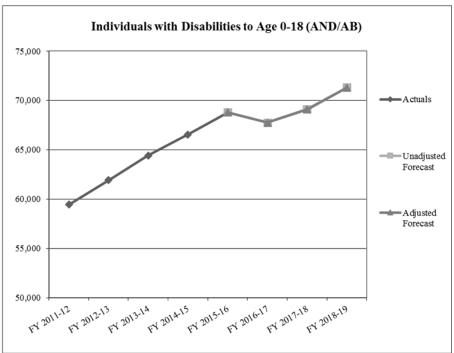
November 2016 Projection After Adjustments						
FY 2015-16	68,800	3.38%	2,252			
FY 2016-17	69,028	0.33%	228			
FY 2017-18	70,603	4.20%	2,843			
FY 2018-19	71,719	3.76%	2,601			

Monthly Average Growth Actuals					
241	0.44%				
342	0.60%				
291	0.52%				
233	0.40%				
118	0.20%				
175	0.30%				
268	0.44%				
307	0.49%				
287	0.47%				
156	0.24%				
82	0.13%				
119	0.19%				
246	0.37%				
214	0.32%				
230	0.35%				
181	0.32%				
(154)	-0.22%				
14	0.05%				
	241 342 291 233 118 175 268 307 287 156 82 119 246 214 230 181 (154)				

Monthly Average Growth Comparisons						
Request	Monthly Change		Percent Change			
	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	174	(230)	0.25%	-0.34%		
FY 2016-17 2nd Half	184	241	0.26%	0.36%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	588	N/A	0.87%		
FY 2016-17	179	5	0.26%	0.01%		
FY 2017-18 1st Half	87	142	0.12%	0.21%		
FY 2017-18 2nd Half	93	210	0.13%	0.30%		
FY 2017-18	90	176	0.13%	0.26%		
FY 2018-19 1st Half	93	157	0.13%	0.22%		
FY 2018-19 2nd Half	95	212	0.13%	0.30%		
FY 2018-19	94	184	0.13%	0.26%		

# Individuals to 59 with Disabilities (AND/AB), Age 0 to 18: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	AND/AB 0-18	Constant, trend, and monthly seasonal variables	13.78	13.42	0.9712
ARIMA	d(AND/AB 0-18)	Constant, AR(1), MA(1)	15.53	15.41	0.139
Trend Stationary	log(AND/AB 0-18)	Constant, trend, and 3 lags on the dependent variable	-3.93	-4.03	0.9392
Difference Stationary	dlog(AND/AB 0-18)	Constant and 2 lags on the dependent variable	-3.71	-3.81	0.1449
Revised Estimate			N/A	N/A	N/A

	Indi	viduals with Disabilities t	o Age 18: Model	Results <sup>1</sup>		
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	12,079	13,632	-8.78%	12,435	(1,197)	(15)
ARIMA	12,079	13,632	-8.11%	12,526	(1,106)	(2)
Trend Stationary	12,079	13,632	-5.61%	12,867	(765)	68
Difference Stationary	12,079	13,632	-8.52%	12,471	(1,161)	(11)
Revised Estimate	12,079	13,632	-8.52%	12,471	(1,161)	(11)
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	13,632	12,435	2.38%	12,731	296	40
ARIMA	13,632	12,526	2.47%	12,835	309	32
Trend Stationary	13,632	12,867	7.02%	13,770	903	48
Difference Stationary	13,632	12,471	1.62%	12,673	202	26
Revised Estimate	13,632	12,471	0.98%	12,593	122	13
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	12,435	12,731	3.79%	13,214	483	40
ARIMA	12,526	12,835	2.95%	13,214	379	32
Trend Stationary	12,867	13,770	4.24%	14,354	584	50
Difference Stationary	12,471	12,673	2.56%	12,997	324	27
Revised Estimate	12,471	12,593	1.29%	12,755	162	14

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Individuals to 59 with Disabilities (AND/AB), Age 0 to 18: Trend Selections

FY 2016-17: -8.52% FY 2017-18: 1.62% FY 2018-19: 2.56%

### Individuals to 59 with Disabilities (AND/AB), Age 0 to 18: Justifications

Beginning with the November 2015 forecast, the Department estimates this eligibility category with two age group sub-categories, to increase forecast accuracy.

The Department identified a data error for July 2015 through December 2015 that incorrectly assigned children to eligibility categories for individuals with disabilities, based on their parents' disability status. This error incorrectly moved clients from Eligible Children and Children's Basic Health Plan (CHP) to Individuals to 59 with Disabilities (AND/AB) and Children with Disabilities - Buy-In. This data issue has falsely inflated the FY 2015-16 actuals, resulting in the spike in clients that can be seen in the graph on page MC-36.

The December 2016 data point was approximately 600 below the November 2016 forecast; therefore, the Department reduced the trend to align with the first half of FY 2016-17 actuals and the lower starting point.

	Actuals	Monthly Change	% Change
Dec-14	11,966	-	-
Jan-15	12,061	95	0.79%
Feb-15	12,045	(16)	-0.13%
Mar-15	12,133	88	0.73%
Apr-15	12,172	39	0.32%
May-15	12,219	47	0.39%
Jun-15	12,531	312	2.55%
Jul-15	17,518	4,987	39.80%
Aug-15	15,782	(1,736)	-9.91%
Sep-15	13,331	(2,451)	-15.53%
Oct-15	13,320	(11)	-0.08%
Nov-15	13,552	232	1.74%
Dec-15	13,353	(199)	-1.47%
Jan-16	13,039	(314)	-2.35%
Feb-16	12,879	(160)	-1.23%
Mar-16	12,791	(88)	-0.68%
Apr-16	12,709	(82)	-0.64%
May-16	12,669	(40)	-0.31%
Jun-16	12,643	(26)	-0.21%
Jul-16	12,565	(78)	-0.62%
Aug-16	12,585	20	0.16%
Sep-16	12,563	(22)	-0.17%
Oct-16	12,566	3	0.02%
Nov-16	12,572	6	0.05%
Dec-16	12,214	(358)	-2.85%

November 2016 Forecast	
Forecasted December 2016 Level	12,869

Base trend from December 2016 level					
FY 2016-17	12.362	-9.31%	(1.270)		

		Individu	als with Dis	abilities to age 18: I	Historical C	as eload and	Projections
	Caseload	% Change	Level Change				
FY 2007-08	9,019	1	-				
FY 2008-09	9,375	3.95%	356				
FY 2009-10	9,812	4.66%	437				
FY 2010-11	10,308	5.06%	496				
FY 2011-12	10,848	5.24%	540				
FY 2012-13	11,436	5.42%	588				
FY 2013-14	12,019	5.10%	583				
FY 2014-15	12,079	0.50%	60	N	ovember 20	16 Projectio	n
FY 2015-16	13,632	12.86%	1,553	FY 2015-16	13,632	12.86%	1,553
FY 2016-17	12,471	-8.52%	(1,161)	FY 2016-17	12,895	-5.41%	(737)
FY 2017-18	12,673	1.62%	202	FY 2017-18	13,291	3.07%	396
FY 2018-19	12,997	2.56%	324	FY 2018-19	13,577	2.15%	286

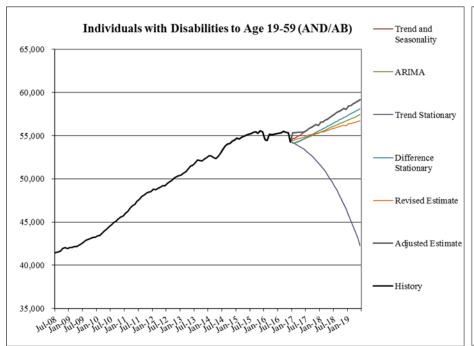
Actuals				
	Monthly Change	% Change		
6-month average	(72)	-0.57%		
12-month average	(95)	-0.74%		
18-month average	(18)	0.32%		
24-month average	10	0.43%		

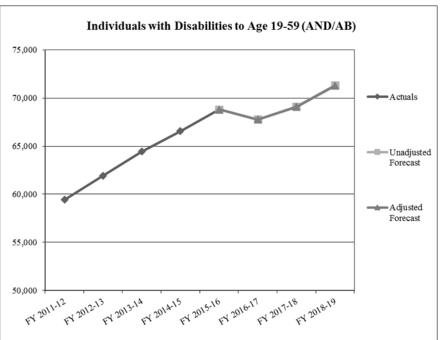
November 2016 Projection						
FY 2015-16	13,632	12.86%	1,553			
FY 2016-17	12,895	-5.41%	(737)			
FY 2017-18	13,291	3.07%	396			
FY 2018-19	13,577	2.15%	286			

Monthly Average Growth Actuals						
FY 2010-11 1st Half	39	0.38%				
FY 2010-11 2nd Half	56	0.54%				
FY 2010-11	47	0.46%				
FY 2011-12 1st Half	41	0.39%				
FY 2011-12 2nd Half	9	0.08%				
FY 2011-12	25	0.23%				
FY 2012-13 1st Half	75	0.68%				
FY 2012-13 2nd Half	103	0.89%				
FY 2012-13	89	0.78%				
FY 2013-14 1st Half	13	0.11%				
FY 2013-14 2nd Half	(19)	-0.16%				
FY 2013-14	(3)	-0.02%				
FY 2014-15 1st Half	8	0.07%				
FY 2014-15 2nd Half	94	0.78%				
FY 2014-15	51	0.42%				
FY 2015-16 1st Half	137	2.42%				
FY 2015-16 2nd Half	(118)	-0.90%				
FY 2015-16	9	0.76%				

Monthly Average Growth Comparisons						
Request	Monthly	Change	Percent	Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	38	(72)	0.30%	-0.57%		
FY 2016-17 2nd Half	45	49	0.35%	0.40%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	154	N/A	1.24%		
FY 2016-17	41	(11)	0.32%	-0.08%		
FY 2017-18 1st Half	23	24	0.17%	0.19%		
FY 2017-18 2nd Half	24	27	0.18%	0.21%		
FY 2017-18	23	26	0.18%	0.20%		
FY 2018-19 1st Half	24	27	0.18%	0.21%		
FY 2018-19 2nd Half	25	28	0.18%	0.21%		
FY 2018-19	24	27	0.18%	0.21%		

# Individuals to 59 with Disabilities (AND/AB), Age 19 to 59: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	AND/AB 19+	Constant, trend, and monthly seasonal variables	16.65	16.34	0.9751
ARIMA	d(AND/AB 19+)	Constant, AR(1), AR(2), MA(1)	13.63	13.55	0.0273
Trend Stationary	log(AND/AB 19+)	Constant, trend, and 2 lags on the dependent variable	-8.13	-8.2	0.9986
Difference Stationary	dlog(AND/AB 19+)	Constant and 1 lag on the dependent variable	-8.14	-8.19	0.0461
Revised Estimate			N/A	N/A	N/A
Adjusted Estimate			N/A	N/A	N/A

	Individuals with Disabilities Ages 19 to 59: Model Results <sup>1</sup>							
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2		
Trend and Seasonality	54,469	55,168	-0.14%	55,091	(77)	13		
ARIMA	54,469	55,168	-0.74%	54,760	(408)	(53)		
Trend Stationary	54,469	55,168	-1.21%	54,500	(668)	(154)		
Difference Stationary	54,469	55,168	-0.71%	54,776	(392)	(47)		
Revised Estimate	54,469	55,168	-0.46%	54,914	(254)	(33)		
Adjusted Estimate	54,469	55,168	0.22%	55,289	121	16		
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2		
Trend and Seasonality	55,168	55,091	2.44%	56,435	1,344	157		
ARIMA	55,168	54,760	1.12%	55,373	613	117		
Trend Stationary	55,168	54,500	-5.34%	51,590	(2,910)	(317)		
Difference Stationary	55,168	54,776	1.50%	55,598	822	141		
Revised Estimate	55,168	54,914	0.82%	55,364	450	79		
Adjusted Estimate	55,168	55,289	2.09%	56,445	1,156	154		
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2		
Trend and Seasonality	55,091	56,435	3.34%	58,320	1,885	157		
ARIMA	54,760	55,373	2.54%	56,779	1,406	117		
Trend Stationary	54,500	51,590	-10.87%	45,982	(5,608)	(606)		
Difference Stationary	54,776	55,598	3.09%	57,316	1,718	145		
Revised Estimate	54,914	55,364	1.70%	56,305	941	79		
Adjusted Estimate	55,289	56,445	3.34%	58,330	1,885	157		

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Individuals to 59 with Disabilities (AND/AB), Age 19 to 59: Trend Selections

FY 2016-17: 0.22% FY 2017-18: 2.03% FY 2018-19: 3.34%

### Individuals to 59 with Disabilities (AND/AB), Age 19 to 59: Justifications

Beginning with the November 2015 forecast, the Department estimates this eligibility category with two age group sub-categories, to increase forecast accuracy. Average monthly caseload growth for FY 2015-16 was 4, with average monthly growth for the first half of FY 2016-17 of -159, due primarily to a large drop in December 2016 of approximately 1,000. The December 2016 data point is nearly 1,800 below what was expected for December in the November 2016 forecast. The Department has accordingly brought down the forecast.

	Actuals	Monthly	%
	Actuals	Change	Change
Dec-14	54,475	-	
Jan-15	54,697	222	0.41%
Feb-15	54,606	(91)	-0.17%
Mar-15	54,841	235	0.43%
Apr-15	54,938	97	0.18%
May-15	55,042	104	0.19%
Jun-15	55,195	153	0.28%
Jul-15	55,242	47	0.09%
Aug-15	55,385	143	0.26%
Sep-15	55,434	49	0.09%
Oct-15	55,256	(178)	-0.32%
Nov-15	55,561	305	0.55%
Dec-15	55,460	(101)	-0.18%
Jan-16	54,532	(928)	-1.67%
Feb-16	54,419	(113)	-0.21%
Mar-16	55,188	769	1.41%
Apr-16	55,119	(69)	-0.13%
May-16	55,173	54	0.10%
Jun-16	55,248	75	0.14%
Jul-16	55,271	23	0.04%
Aug-16	55,321	50	0.09%
Sep-16	55,480	159	0.29%
Oct-16	55,385	(95)	-0.17%
Nov-16	55,342	(43)	-0.08%
Dec-16	54,295	(1,047)	-1.89%

November 2016 Forecast	
Forecasted December 2016 Level	56,064

Base trend from December 2016 level					
FY 2016-17	54 739	-0.78%	(429)		

Individuals with Disabilities ages 19 to 59: Historical Caseload and Projections							
	Caseload	% Change	Level Change				
FY 2007-08	40,914	-	-				
FY 2008-09	41,980	2.61%	1,066				
FY 2009-10	43,452	3.51%	1,472				
FY 2010-11	45,977	5.81%	2,525				
FY 2011-12	48,586	5.67%	2,609				
FY 2012-13	50,484	3.91%	1,898				
FY 2013-14	52,405	3.81%	1,921				
FY 2014-15	54,469	3.94%	2,064	Noven	nber 2016 F Adjust	rojection Be ments	fore
FY 2015-16	55,168	1.28%	699	FY 2015-16	55,168	1.28%	699
FY 2016-17	55,289	0.22%	121	FY 2016-17	56,133	1.75%	965
FY 2017-18	56,445	2.09%	1,156	FY 2017-18	57,345	2.16%	1,212
FY 2018-19	58,330	3.34%	1,885	FY 2018-19	58,177	1.45%	832

HB 16-1321 Medicaid Buy-In for SLS, SCI, and BI Waivers		
FY 2015-16	0	
FY 2016-17	0	
FY 2017-18	(33)	
FY 2018-19	(35)	

February 2017 Projections After Adjustments					
FY 2015-16	55,168	1.28%	699		
FY 2016-17	55,289	0.22%	121		
FY 2017-18	56,412	2.03%	1,123		
FY 2018-19	58,295	3.34%	1,883		

Actuals				
Monthly				
	Change	Change		
6-month average	(159)	-0.29%		
12-month average	(97)	-0.17%		
18-month average	(50)	-0.09%		
24-month average	(8)	-0.01%		

November 2016 Projection Before Adjustments					
FY 2015-16	55,168	1.28%	699		
FY 2016-17	56,133	1.75%	965		
FY 2017-18	57,345	2.16%	1,212		
FY 2018-19	58,177	1.45%	832		

HB 16-1321 Medicaid Buy-In for SLS, SCI, and BI Waivers		
FY 2015-16	0	
FY 2016-17	0	
FY 2017-18	(33)	
FY 2018-19	(35)	

November 2016 Projection After Adjustments				
FY 2015-16	55,168	1.28%	699	
FY 2016-17	56,133	1.75%	965	
FY 2017-18	57,312	3.66%	2,023	
FY 2018-19	58,142	3.01%	1,697	

Monthly Average Growth Actuals				
FY 2010-11 1st Half	202	0.45%		
FY 2010-11 2nd Half	285	0.62%		
FY 2010-11	244	0.53%		
FY 2011-12 1st Half	192	0.40%		
FY 2011-12 2nd Half	109	0.22%		
FY 2011-12	150	0.31%		
FY 2012-13 1st Half	193	0.39%		
FY 2012-13 2nd Half	204	0.40%		
FY 2012-13	198	0.39%		
FY 2013-14 1st Half	144	0.28%		
FY 2013-14 2nd Half	101	0.19%		
FY 2013-14	122	0.23%		
FY 2014-15 1st Half	238	0.44%		
FY 2014-15 2nd Half	120	0.22%		
FY 2014-15	179	0.33%		
FY 2015-16 1st Half	44	0.08%		
FY 2015-16 2nd Half	(35)	-0.06%		
FY 2015-16	4	0.01%		
1.1 2013-10	4	0.01%		

Monthly Average Growth Comparisons						
Request	Monthly	Monthly Change		Percent Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	136	(159)	0.24%	-0.29%		
FY 2016-17 2nd Half	139	192	0.25%	0.35%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	433	N/A	0.78%		
FY 2016-17	137	16	0.25%	0.03%		
FY 2017-18 1st Half	64	118	0.11%	0.21%		
FY 2017-18 2nd Half	69	183	0.12%	0.32%		
FY 2017-18	67	151	0.12%	0.27%		
FY 2018-19 1st Half	69	130	0.12%	0.23%		
FY 2018-19 2nd Half	70	184	0.12%	0.31%		
FY 2018-19	69	157	0.12%	0.27%		

#### Working Adults and Children with Disabilities – Buy-In

HB 09-1293 (Colorado Health Care Affordability Act) establishes the Buy-In Program for Individuals with Disabilities, which will allow individuals to pay a premium to purchase Medicaid coverage if they are over income or are otherwise ineligible for Medicaid. The Buy-In Program for Working Adults with Disabilities was implemented on March 1, 2012 and allows eligible clients age 16 to 65 with income up to 450% of the federal poverty level that have a qualifying disability and are working to receive Medicaid by paying a monthly premium based on their income. The Buy-In Program for Disabled Children was implemented on July 1, 2012. This program allows children under age 19 with a qualifying disability and family income up to 300% of the federal poverty level to receive Medicaid by paying a monthly premium based on their family income.

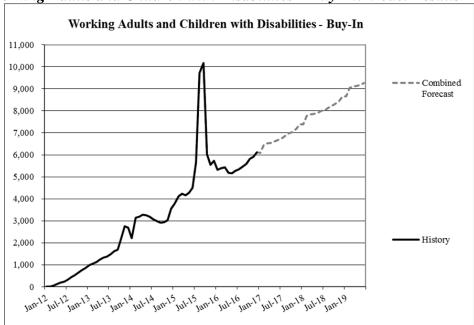
### 25.5-5-206 (1), C.R.S.

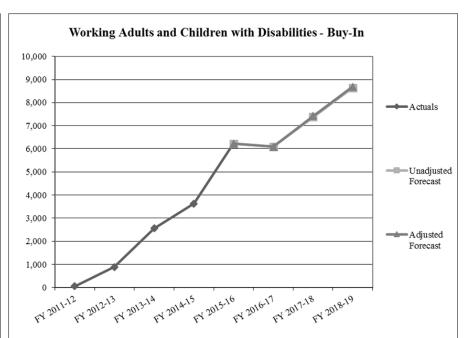
- (a) Subject to available appropriations, the state department is authorized to seek federal authorization to and to establish a Medicaid buy-in program or programs for:
  - (I) Disabled children; or
  - (II) Disabled adults who do not qualify for the Medicaid buy-in program established pursuant to part 14 of article 6 of this title.
- (b) The Medicaid buy-in program or programs established pursuant to paragraph (a) of this subsection (1) may provide for premium and cost-sharing charges on a sliding fee scale based upon a family's income.

### 25.5-5-206 (2), C.R.S.

The state board shall promulgate rules consistent with any federal authorization to implement and administer the Medicaid buy-in program or programs established pursuant to paragraph (a) of subsection (1) of this section.

Working Adults and Children with Disabilities – Buy-In: Model Results





Working Adults and Children with Disabilities - Buy-In: Model Results <sup>1</sup>						
FY 2016-17 FY 2014-15 FY 2015-16 Projected Crowth Rate 2016-17 Level Mont						Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	3,627	6,217	-1.96%	6,095	(122)	119

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	6,217	6,095	21.64%	7,414	1,319	109
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	6,095	7,414	17.09%	8,680	1,266	106

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# Working Adults and Children with Disabilities – Buy-In: Trend Selections

FY 2016-17: -1.96% FY 2017-18: 21.64% FY 2018-19: 17.08%

### Working Adults and Children with Disabilities – Buy-In: Justifications

- Average monthly caseload in FY 2015-16 for Working Adults and Children with Disabilities Buy-In was 6,217, though this number was inflated due to a known system error that was corrected in December 2015. The Department has selected models separately for working adults and children. See below for more details.
- HB 09-1293 established the Buy-In Program for Working Adults with Disabilities beginning March 1, 2012 and for Disabled Children July 1, 2012. This program allows individuals to pay a premium to purchase Medicaid coverage if they are over income or are otherwise ineligible for Medicaid.
- HB 16-1321 allows for a Medicaid Buy-In option for Supported Living Services waiver (under the Office of Community Living) and the Spinal Cord Injury and Brain Injury waivers under Medical Services Premiums, beginning in FY 2017-18. A positive bottom-line impact has been added to this category to account for clients transitioning to this category from Individuals to 59 with Disabilities (AND/AB), with the expanded option for increased employment.

	Actuals	Monthly	%	
Dec-14	2.556	Change	Change	
Jan-15	3,556 3,772	216	6.07%	
Feb-15	4,112	340	9.01%	
Mar-15	4,226	114	2.77%	
Apr-15	4,161	(65)	-1.54%	
May-15	4,279	118	2.84%	
Jun-15	4,509	230	5.38%	
Jul-15	5,670	1,161	25.75%	
Aug-15	9,733	4,063	71.66%	
Sep-15	10,175	442	4.54%	
Oct-15	6,030	(4,145)	-40.74%	
Nov-15	5,539	(491)	-8.14%	
Dec-15	5,717	178	3.21%	
Jan-16	5,311	(406)	-7.10%	
Feb-16	5,393	82	1.54%	
Mar-16	5,424	31	0.57%	
Apr-16	5,192	(232)	-4.28%	
May-16	5,152	(40)	-0.77%	
Jun-16	5,265	113	2.19%	
Jul-16	5,334	69	1.31%	
Aug-16	5,452	118	2.21%	
Sep-16	5,598	146	2.68%	
Oct-16	5,825	227	4.06%	
Nov-16	5,918	93	1.60%	
Dec-16	6,114	196	3.31%	

November 2016 Forecast	
Forecasted December 2016 Level	5,797

Base trend from December 2016 level							
FY 2016-17 5,910 -4.93% (307)							

Working Adults and Children with Disabilities - Buy-In: Historical Caseload and Projection						
	Caseload	% Change	Level Change			
FY 2011-12	52	-	-			
FY 2012-13	888	1607.69%	836			
FY 2013-14	2,560	188.29%	1,672			
FY 2014-15	3,627	41.68%	1,067	November 2016 Projection Before Adjustments		
FY 2015-16	6,217	71.41%	2,590	FY 2015-16 6,217 71.41% 2,590		
FY 2016-17	6,095	-1.96%	(122)	FY 2016-17 5,844 -6.00% (373)		
FY 2017-18	7,376	21.02%	1,281	FY 2017-18 6,863 17.44% 1,019		
FY 2018-19	8,639	17.12%	1,263	FY 2018-19 7,872 14.70% 1,009		

HB 16-1321 Medicaid Buy-In for SLS, SCI, and BI Waivers				
FY 2015-16	0			
FY 2016-17	0			
FY 2017-18	38			
FY 2018-19	41			

February 2017 Projections After Adjustments						
FY 2015-16	6,217	71.41%	2,590			
FY 2016-17	6,095	-1.96%	(122)			
FY 2017-18	7,414	21.64%	1,319			
FY 2018-19	8,680	17.08%	1,266			

Actuals					
	Monthly Change	% Change			
6-month average	142	2.53%			
12-month average	33	0.61%			
18-month average	89	3.53%			
24-month average	107	3.67%			

November 2016 Projection Before Adjustments					
FY 2015-16	6,217	71.41%	2,590		
FY 2016-17	5,844	-6.00%	(373)		
FY 2017-18	6,863	17.44%	1,019		
FY 2018-19	7,872	14.70%	1,009		

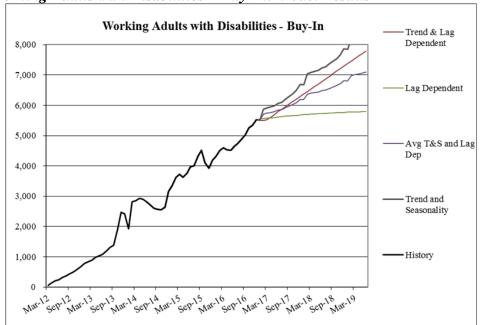
HB 16-1321 Medicaid Buy-In for SLS, SCI, and BI Waivers				
FY 2015-16	0			
FY 2016-17	0			
FY 2017-18	38			
FY 2018-19	41			

November 2016 Projection After Adjustments						
FY 2015-16	6,217	71.41%	2,590			
FY 2016-17	5,844	-6.00%	(373)			
FY 2017-18	6,901	18.09%	1,057			
FY 2018-19	7,913	14.66%	1,012			

Monthly Average (	Growth Actu	als
FY 2010-11 1st Half	0	
FY 2010-11 2nd Half	0	
FY 2010-11	0	
FY 2011-12 1st Half	0	
FY 2011-12 2nd Half	40	
FY 2011-12	20	
FY 2012-13 1st Half	103	23.97%
FY 2012-13 2nd Half	85	8.16%
FY 2012-13	94	16.07%
FY 2013-14 1st Half	220	12.49%
FY 2013-14 2nd Half	83	4.28%
FY 2013-14	152	8.38%
FY 2014-15 1st Half	62	2.09%
FY 2014-15 2nd Half	159	4.09%
FY 2014-15	110	3.09%
FY 2015-16 1st Half	201	9.38%
FY 2015-16 2nd Half	(75)	-1.31%
FY 2015-16	63	4.04%

Monthly Average Growth Comparisons					
Dogwood	Monthly	Change	Percent	Change	
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	89	142	1.62%	2.53%	
FY 2016-17 2nd Half	88	96	1.46%	1.52%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	35	N/A	0.58%	
FY 2016-17	88	119	1.54%	2.03%	
FY 2017-18 1st Half	88	117	1.34%	1.67%	
FY 2017-18 2nd Half	87	101	1.24%	1.34%	
FY 2017-18	88	109	1.29%	1.51%	
FY 2018-19 1st Half	81	111	1.07%	1.34%	
FY 2018-19 2nd Half	87	101	1.08%	1.14%	
FY 2018-19	84	106	1.08%	1.24%	

# Working Adults with Disabilities – Buy-In: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	DBI-Adults	Constant, trend, and monthly seasonal variables	10.93	10.36	0.9104
Trend & Lag Dependent	DBI-Adults	Constant, October 2013 dummy, trend, and 1 lag on the dependent variable	15.95	15.68	0.7055
Lag Dependent	DBI-Adults	Constant, October 2013 dummy, and 1 lag on the dependent variable	15.80	15.42	0.7840
Avg T&S and Lag Dep					

Working Adults with Disabilities - Buy-In: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	3,189	4,345	26.74%	5,507	1,162	117
Trend & Lag Dependent	3,189	4,345	23.54%	5,368	1,023	95
Lag Dependent	3,189	4,345	23.22%	5,354	1,009	80
Avg T&S and Lag Dep	3,189	4,345	24.97%	5,430	1,085	99

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	4,345	5,507	21.79%	6,707	1,200	97
Trend & Lag Dependent	4,345	5,368	17.96%	6,332	964	83
Lag Dependent	4,345	5,354	6.11%	5,681	327	10
Avg T&S and Lag Dep	4,345	5,430	14.07%	6,194	764	53

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	5,507	6,707	17.40%	7,874	1,167	97
Trend & Lag Dependent	5,368	6,332	15.79%	7,332	1,000	83
Lag Dependent	5,354	5,681	1.50%	5,766	85	5
Avg T&S and Lag Dep	5,430	6,194	10.11%	6,820	626	51

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Working Adults with Disabilities – Buy-In: Trend Selections

FY 2016-17: 26.74% FY 2017-18: 22.48% FY 2018-19: 17.35%

## Working Adults with Disabilities – Buy-In: Justifications

Beginning with the November 2015 forecast, the Department estimates this eligibility category with sub-categories, to increase forecast accuracy. FY 2015-16 actuals were 4,345. The December 2016 data point was 356 higher than the December estimate in the November 2016 forecast; the Department has brought the forecast up from the November 2016 estimates.

	Actuals	Monthly Change	% Change
Dec-14	3,155	-	
Jan-15	3,342	187	5.93%
Feb-15	3,623	281	8.41%
Mar-15	3,718	95	2.62%
Apr-15	3,630	(88)	-2.37%
May-15	3,755	125	3.44%
Jun-15	3,973	218	5.81%
Jul-15	3,995	22	0.55%
Aug-15	4,318	323	8.09%
Sep-15	4,508	190	4.40%
Oct-15	4,109	(399)	-8.85%
Nov-15	3,926	(183)	-4.45%
Dec-15	4,178	252	6.42%
Jan-16	4,313	135	3.23%
Feb-16	4,507	194	4.50%
Mar-16	4,592	85	1.89%
Apr-16	4,525	(67)	-1.46%
May-16	4,518	(7)	-0.15%
Jun-16	4,653	135	2.99%
Jul-16	4,750	97	2.08%
Aug-16	4,875	125	2.63%
Sep-16	5,032	157	3.22%
Oct-16	5,255	223	4.43%
Nov-16	5,334	79	1.50%
Dec-16	5,527	193	3.62%

November 2016 Forecas	t
Forecasted December 2016 Level	5,171

Base trend from December 2016 level				
FY 2016-17	5,328	22.62%	983	

	Working Adults with Disabilities - Buy-In: Historical Caseload and Projections							
	Caseload	% Change	Level Change					
FY 2011-12	52	-	-					
FY 2012-13	707	1259.62%	655					
FY 2013-14	2,243	217.26%	1,536					
FY 2014-15	3,189	42.18%	946	November 20	16 Projecti	on Before Ad	ljus tments	
FY 2015-16	4,345	36.25%	1,156	FY 2015-16	4,345	36.25%	1,156	
FY 2016-17	5,507	26.74%	1,162	FY 2016-17	5,207	19.84%	862	
FY 2017-18	6,707	21.79%	1,200	FY 2017-18	6,145	18.01%	938	
FY 2018-19	7,874	17.40%	1,167	FY 2018-19	7,078	15.18%	933	

HB 16-1321 Medicaid Buy-In for SLS, SCI, and BI Waivers					
FY 2015-16	0				
FY 2016-17	0				
FY 2017-18	38				
FY 2018-19	41				

February 2017 Projections After Adjustments					
FY 2015-16	4,345	36.25%	1,156		
FY 2016-17	5,507	26.74%	1,162		
FY 2017-18	6,745	22.48%	1,238		
FY 2018-19	7,915	17.35%	1,170		

Actuals					
	Monthly Change	% Change			
6-month average	146	2.92%			
12-month average	112	2.37%			
18-month average	86	1.92%			
24-month average	99	2.44%			

November 2016 Projection Before Adjustments					
FY 2015-16	4,345	36.25%	1,156		
FY 2016-17	5,207	19.84%	862		
FY 2017-18	6,145	18.01%	938		
FY 2018-19	7,078	15.18%	933		

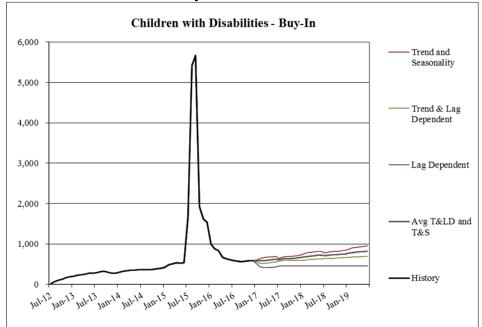
HB 16-1321 Medicaid Buy-In for SLS, SCI, and BI Waivers				
FY 2015-16	0			
FY 2016-17	0			
FY 2017-18	38			
FY 2018-19	41			

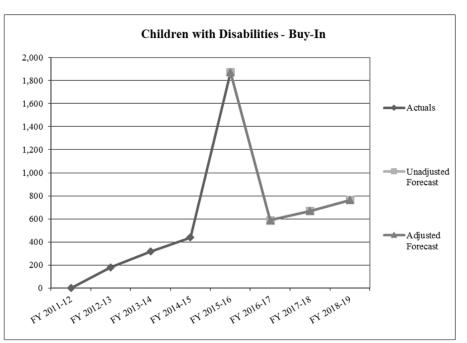
November 2	November 2016 Projection After Adjustments					
FY 2015-16	4,345	36.25%	1,156			
FY 2016-17	5,207	19.84%	862			
FY 2017-18	6,183	18.74%	976			
FY 2018-19	7,119	15.14%	936			

Monthly Average Growth Actuals						
FY 2010-11 1st Half	0	-				
FY 2010-11 2nd Half	0	-				
FY 2010-11	0	-				
FY 2011-12 1st Half	0	-				
FY 2011-12 2nd Half	40	-				
FY 2011-12	20	-				
FY 2012-13 1st Half	71	18.66%				
FY 2012-13 2nd Half	71	8.65%				
FY 2012-13	71	13.65%				
FY 2013-14 1st Half	221	15.09%				
FY 2013-14 2nd Half	68	4.45%				
FY 2013-14	145	9.77%				
FY 2014-15 1st Half	55	2.17%				
FY 2014-15 2nd Half	136	3.97%				
FY 2014-15	96	3.07%				
FY 2015-16 1st Half	34	1.03%				
FY 2015-16 2nd Half	79	1.83%				
FY 2015-16	57	1.43%				

Monthly Average Growth Comparisons						
Demost	Monthly	Change	Percent	Change		
Request	R-1 S-1		R-1	S-1		
FY 2016-17 1st Half	86	146	1.78%	2.92%		
FY 2016-17 2nd Half	78	89	1.45%	1.58%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	19	N/A	0.34%		
FY 2016-17	82	117	1.61%	2.25%		
FY 2017-18 1st Half	84	112	1.44%	1.76%		
FY 2017-18 2nd Half	78	89	1.23%	1.30%		
FY 2017-18	81	100	1.33%	1.53%		
FY 2018-19 1st Half	78	106	1.15%	1.41%		
FY 2018-19 2nd Half	78	89	1.07%	1.11%		
FY 2018-19	78	98	1.11%	1.26%		

# Children with Disabilities – Buy-In: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	DBI-Children	Constant, trend, and monthly seasonal variables	10.93	10.36	0.9104
Trend & Lag Dependent	DBI-Children	Constant, trend, and 2 lags on the dependent variable	15.95	15.68	0.7055
Lag Dependent	DBI-Children	Constant and 1 lag on the dependent variable	15.80	15.42	0.7840
Avg T&LD and T&S					

	Children with Disabilities - Buy-In: Model Results <sup>1</sup>					
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	438	1,872	-66.93%	619	(1,253)	7
Trend & Lag Dependent	438	1,872	-70.25%	557	(1,315)	(5)
Lag Dependent	438	1,872	-72.81%	509	(1,363)	(15)
Avg T&LD and T&S	438	1,872	-68.59%	588	(1,284)	1

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	1,872	619	19.06%	737	118	11
Trend & Lag Dependent	1,872	557	7.90%	601	44	6
Lag Dependent	1,872	509	-10.81%	454	(55)	2
Avg T&LD and T&S	1,872	588	13.78%	669	81	8

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	619	737	17.37%	865	128	11
Trend & Lag Dependent	557	601	10.65%	665	64	5
Lag Dependent	509	454	-0.44%	452	(2)	0
Avg T&LD and T&S	588	669	14.35%	765	96	8

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Children with Disabilities – Buy-In: Trend Selections

FY 2016-17: -68.59% FY 2017-18: 13.78% FY 2018-19: 14.35%

### Children with Disabilities – Buy-In: Justifications

Beginning with the November 2015 forecast, the Department has begun estimating this eligibility category with sub-categories, to increase forecast accuracy.

The Department identified a data error for July 2015 through December 2015 that incorrectly assigned children to eligibility categories for individuals with disabilities, based on their parents' disability status. This error incorrectly moved clients from Eligible Children and Children's Basic Health Plan (CHP) to Individuals to 59 with Disabilities and Children with Disabilities - Buy-In. Due to the small caseload level for this population, Children with Disabilities – Buy-In was disproportionately affected by this data issue, which falsely inflated the FY 2015-16 actuals, resulting in the spike in clients that can be seen in the graph on page MC-52. The Department has brought this forecast down slightly from the November 2016 request, based on the actuals in the first half of FY 2016-17, which had an average growth of -4 clients per month.

		~			
	Actuals	Monthly	%		
		Change	Change		
Dec-14	401	-	-		
Jan-15	430	29	7.23%		
Feb-15	489	59	13.72%		
Mar-15	508	19	3.89%		
Apr-15	531	23	4.53%		
May-15	524	(7)	-1.32%		
Jun-15	536	12	2.29%		
Jul-15	1,675	1,139	212.50%		
Aug-15	5,415	3,740	223.28%		
Sep-15	5,667	252	4.65%		
Oct-15	1,921	(3,746)	-66.10%		
Nov-15	1,613	(308)	-16.03%		
Dec-15	1,539	(74)	-4.59%		
Jan-16	998	(541)	-35.15%		
Feb-16	886	(112)	-11.22%		
Mar-16	832	(54)	-6.09%		
Apr-16	667	(165)	-19.83%		
May-16	634	(33)	-4.95%		
Jun-16	612	(22)	-3.47%		
Jul-16	584	(28)	-4.58%		
Aug-16	577	(7)	-1.20%		
Sep-16	566	(11)	-1.91%		
Oct-16	570	4	0.71%		
Nov-16	584	14	2.46%		
Dec-16	587	3	0.51%		

November 2016 Forecast	
Forecasted December 2016 Level	626

Base trend from December 2016 level						
FY 2016-17	583	-68.88%	(1,290)			

	Children with Disabilities - Buy-In: Historical Caseload and Projections								
	Caseload	% Change	Level Change						
FY 2012-13	181	-	-						
FY 2013-14	317	75.14%	136						
FY 2014-15	438	38.17%	121	N	ovember 201	6 Projection			
FY 2015-16	1,872	327.40%	1,434	FY 2015-16	1,872	327.40%	1		
FY 2016-17	588	-68.59%	(1,284)	FY 2016-17	637	-65.97%	(1		
FY 2017-18	669	13.78%	81	FY 2017-18	718	12.72%			
FY 2018-19	765	14.35%	96	FY 2018-19	794	10.58%			

Actuals						
	Monthly Change	% Change				
6-month average	(4)	-0.67%				
12-month average	(79)	-7.06%				
18-month average	3	14.94%				
24-month average	8	12.47%				

November 2016 Projection						
FY 2015-16	1,872	327.40%	1,434			
FY 2016-17	637	-65.97%	(1,235)			
FY 2017-18	718	12.72%	81			
FY 2018-19	794	10.58%	76			

Monthly Average Growth Actuals						
FY 2010-11 1st Half	0	-				
FY 2010-11 2nd Half	0	-				
FY 2010-11	0	1				
FY 2011-12 1st Half	0	-				
FY 2011-12 2nd Half	0	-				
FY 2011-12	0	-				
FY 2012-13 1st Half	32	-				
FY 2012-13 2nd Half	15	-				
FY 2012-13	23	-				
FY 2013-14 1st Half	(1)	-0.08%				
FY 2013-14 2nd Half	14	4.67%				
FY 2013-14	7	2.29%				
FY 2014-15 1st Half	6	1.70%				
FY 2014-15 2nd Half	23	5.06%				
FY 2014-15	14	3.38%				
FY 2015-16 1st Half	167	58.95%				
FY 2015-16 2nd Half	(155)	-13.45%				
FY 2015-16	6	22.75%				

Monthly Average Growth Comparisons						
Daguage	Monthly	Change	Percent	Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	2	(4)	0.39%	-0.67%		
FY 2016-17 2nd Half	10	6	1.56%	1.03%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	17	N/A	2.82%		
FY 2016-17	6	1	0.98%	0.18%		
FY 2017-18 1st Half	3	5	0.51%	0.81%		
FY 2017-18 2nd Half	10	12	1.32%	1.72%		
FY 2017-18	7	8	0.92%	1.27%		
FY 2018-19 1st Half	3	5	0.40%	0.64%		
FY 2018-19 2nd Half	9	11	1.16%	1.46%		
FY 2018-19	6	8	0.78%	1.05%		

### MAGI Parents/Caretakers to 68% FPL

One of the primary ways that adults have historically qualified for Medicaid is through Section 1931 of the federal Medicaid statute. Under Section 1931, families who were eligible for cash welfare assistance under the Aid to Families with Dependent Children program are still eligible for Medicaid even after the Aid to Families with Dependent Children was replaced by the Temporary Assistance for Needy Families program (referred to as Colorado Works) on July 16, 1996. Clients enrolled in the Temporary Assistance for Needy Families program are no longer automatically eligible for Medicaid. Therefore, the MAGI Parents/Caretakers to 68% FPL category includes adults who receive Medicaid under Section 1931 and those families who receive Temporary Aid to Needy Families financial assistance coupled with Medicaid. Also included in this category are adults receiving Transitional Medicaid. Transitional Medicaid is available to adults in families who have received 1931 Medicaid in three of the past six months and become ineligible due to an increase in earned income. Adults may receive Transitional Medicaid benefits for one year. In FY 2015-16, there were an average of 29,329 adults in this program. Although this program has been set to expire many times, it has been renewed regularly, though most recently it was made permanent.

Before 1999, caseload in this category was falling. Decreases in caseload can be attributed to economic expansion and effects of the Personal Responsibility Work and Opportunity Reconciliation Act, known as welfare reform. When welfare reform was instituted in Colorado in 1997, the link between cash assistance for welfare and Medicaid was broken. When the Department implemented this change into the Client Oriented Information Network eligibility data system, it was estimated that  $46,006^{12}$  clients had their cases closed in error. In reaction, the Tatum lawsuit was brought against the State. Starting in May 2001, the Department began to reinstate clients who inadvertently lost their Medicaid eligibility. This may help to explain why from 1997 to 1999 caseload fell, and may have contributed to a spike in caseload in FY 2001-02. For a complete explanation of the Tatum lawsuit, see the November 1, 2001 Budget Request, pages A-37 to A-38.

HB 05-1262 (Tobacco Tax bill) allows for expanding Medicaid eligibility to parents of children enrolled in either Medicaid or the Children's Basic Health Plan up to 60% of the federal poverty level (FPL). The increase in the percentage of allowable federal poverty level was implemented on July 1, 2006.

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<sup>&</sup>lt;sup>12</sup> Source: November 1, 2001 Budget Request, page A-37

## 25.5-5-101 (1), C.R.S.

- (a) Individuals who meet the eligibility criteria for the aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;
- (b) Families who meet the eligibility criteria for the aid to families with dependent children program established in rules that were in effect on July 16, 1996, and who subsequently would have become ineligible under such eligibility criteria because of increased earnings or increased hours of employment whose eligibility is specified for a period of time by the federal government;
- (c) Qualified pregnant women . . . who meet the income resource requirements of the state's aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;

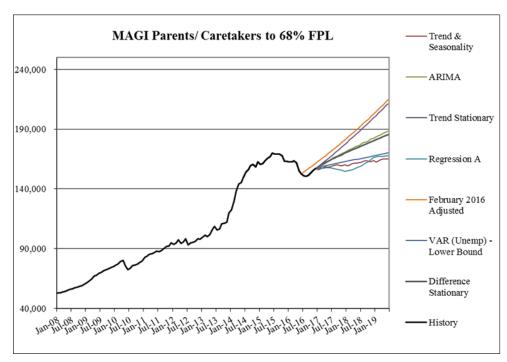
#### 25.5-5-201 (1), C.R.S.

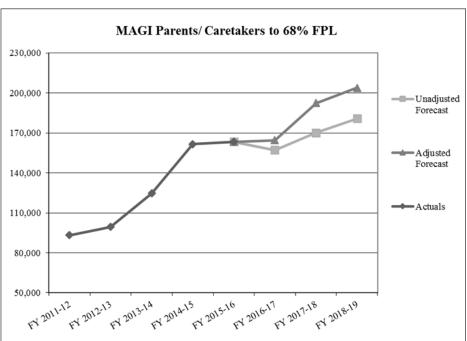
- (a) Individuals who would be eligible for but are not receiving cash assistance;
- (d) Individuals who would be eligible for aid to families with dependent children if child care were paid from earnings;
- (h) Persons who are eligible for cash assistance under the works program pursuant to section 26-2-706;

### 25.5-5-201 (1), C.R.S.

(m) (I)(A) Parents of children who are eligible for the medical assistance program or the children's basic health plan, article 8 of this title, whose family income does not exceed a specified percent of the federal poverty level, adjusted for family size, as set by the state board by rule, which percentage shall be not less than one hundred percent;

## MAGI Parents/Caretakers to 68% FPL: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	PC to 68%	Constant, dummy for October 2013, dummy for January 2014, trend, seasonal dummy variables	21.92	21.71	0.9143
ARIMA	d(PC to 68%)	Constant, AR(1), AR(2), AR(3), MA(1), MA(2), MA(3)	18.35	18.15	0.1999
Trend Stationary	log(PC to 68%)	Constant, 4 lags on the dependent variable	-5.01	-5.11	0.9990
Difference Stationary	dlog(PC to 68%)	Constant, 3 lags on the dependent variable	-5.01	-5.09	0.19
Regression A	dlog(PC to 68%)	Constant, October 2013 dummy, dlog(unemployment), October dummy* dlog(unemployment), and 3 lags on the dependent variable	-4.98	-5.11	0.2206
February 2016 Adjusted			NA	NA	NA
VAR (Unemp) - Lower Bound			NA	NA	NA

	MAGI P	arents/ Caretakers to 68°	% FPL: Model R	esults <sup>1</sup>		
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	161,682	163,342	-4.84%	155,436	(7,906)	496
ARIMA	161,682	163,342	-3.59%	157,478	(5,864)	973
Trend Stationary	161,682	163,342	-3.28%	157,984	(5,358)	1,186
Difference Stationary	161,682	163,342	-3.74%	157,233	(6,109)	948
Regression A	161,682	163,342	-4.92%	155,306	(8,036)	402
February 2016 Adjusted	161,682	163,342	0.42%	164,028	686	2,900
VAR (Unemp) - Lower Bound	161,682	163,342	13.58%	185,524	22,182	637
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	163,342	155,436	3.18%	160,379	4,943	275
ARIMA	163,342	157,478	8.75%	171,257	13,779	1,006
Trend Stationary	163,342	157,984	12.81%	178,222	20,238	1,764
Difference Stationary	163,342	157,233	8.24%	170,189	12,956	921
Regression A	163,342	155,306	0.64%	156,300	994	72
February 2016 Adjusted	163,342	164,028	-0.02%	163,995	(33)	(3,612)
VAR (Unemp) - Lower Bound	163,342	185,524	4.65%	194,151	8,627	407
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	155,436	160,379	2.06%	163,683	3,304	275
ARIMA	157,478	171,257	6.90%	183,074	11,817	983
Trend Stationary	157,984	178,222	12.50%	200,500	22,278	1,938
Difference Stationary	157,233	170,189	6.21%	180,758	10,569	873
Regression A	155,306	156,300	5.55%	164,975	8,675	755
February 2016 Adjusted	164,028	163,995	2.69%	168,406	4,411	3,736
VAR (Unemp) - Lower Bound	185,524	194,151	4.65%	203,179	9,028	409

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### MAGI Parents/Caretakers to 68% FPL: Trend Selections

FY 2016-17: 0.69% FY 2017-18: 17.03% FY 2018-19: 5.92%

### MAGI Parents/Caretakers to 68% FPL: Justifications

- Average monthly caseload in FY 2015-16 for MAGI Parents/Caretakers to 68% FPL was 163,342, with negative caseload growth for the year. However, the Department identified a systems issue that may be inadvertently moving clients out of this category and into expansion categories. The Department expects this issue to be resolved no later than March 2017, at which point a one-time movement of clients is expected to occur from MAGI Parents/Caretakers 69-133% FPL to this category. The effect of this system fix has been accounted for as a bottom line impact.
- Recent data indicate that economic conditions began improving towards the end of 2012 and current forecasts indicate that this trend should continue. This economic recovery, however, is not projected to have a negative impact on caseload. SB 13-200 Medicaid Expansion was implemented January 2014 and the MAGI conversion was implemented in October 2013. These two factors have changed the population considerably. The Department believes it will see moderate growth continue in FY 2016-17 after the system fix described above, which will dampen but remain relatively high in the out-years.
- The Department believes that economic conditions are largely responsible for the growth from FY 2008-09 to FY 2011-12, as the seasonally adjusted unemployment rate increased from a low of 3.5% in March 2007 to a high of 9.3% in February 2011 (source: Bureau of Labor Statistics). The unemployment rate has largely exceeded 8.0% since April 2009, and has only recently fallen below that level, in October 2012. Unemployment is projected to continue falling for the next three fiscal years, but a declining caseload is not expected to accompany the improving economy as Medicaid is undergoing an expansionary period.
- This forecast has three bottom-line adjustments.
  - O The first accounts for a rule change that begins in November 2016. The Department received clarification from CMS that there are no requirements regarding dependent child enrollment in Medicaid in order for MAGI Parents/Caretakers to 68% FPL to have Medicaid eligibility, but there is a requirement that dependent children be enrolled in minimum essential coverage (MEC) in order for MAGI Parents/Caretakers 69-133% FPL or MAGI Adults to have Medicaid eligibility. This bottom-line adjustment accounts for client movement to this eligibility category from MAGI Adults, based on this change. This adjustment has been updated to account for the change already going into effect and partially being accounted for in the base trend.
  - o The second adjustment accounts for the impact of annualized income beginning July 1, 2016. Annualized income allows individuals with seasonal fluctuations in income to remain eligible throughout the year so long as their income, annualized for the year, meets Medicaid qualification requirements. This adjustment has been updated to account for the change already going into effect and partially being accounted for in the base trend.
  - The third adjustment accounts for the system fix that is expected to go into place in March 2017, that will move clients from the MAGI Parents/Caretakers 69-133% FPL category to this category.

	Actuals	Monthly Change	% Change
Dec-14	162,727	-	
Jan-15	160,406	(2,321)	-1.439
Feb-15	161,480	1,074	0.679
Mar-15	163,641	2,161	1.349
Apr-15	165,835	2,194	1.349
May-15	167,183	1,348	0.819
Jun-15	169,912	2,729	1.639
Jul-15	169,316	(596)	-0.359
Aug-15	169,140	(176)	-0.109
Sep-15	169,127	(13)	-0.019
Oct-15	167,734	(1,393)	-0.829
Nov-15	162,975	(4,759)	-2.849
Dec-15	163,088	113	0.079
Jan-16	162,764	(324)	-0.209
Feb-16	162,650	(114)	-0.079
Mar-16	163,417	767	0.479
Apr-16	161,967	(1,450)	-0.899
May-16	155,252	(6,715)	-4.159
Jun-16	152,679	(2,573)	-1.669
Jul-16	150,888	(1,791)	-1.179
Aug-16	150,673	(215)	-0.149
Sep-16	151,271	598	0.409
Oct-16	153,579	2,308	1.539
Nov-16	155,687	2,108	1.379
Dec-16	157,155	1,468	0.949

		MAGI	Parents/ Ca	retakers to 68%	FPL: Histori	cal Caseload	and Proje
	Caseload	% Change	Level Change				
FY 2003-04	47,562	-	-				
FY 2004-05	57,140	20.14%	9,578				
FY 2005-06	58,885	3.05%	1,745				
FY 2006-07	55,850	-5.15%	(3,035)				
FY 2007-08	53,473	-4.26%	(2,377)				
FY 2008-09	61,874	15.71%	8,401				
FY 2009-10	74,839	20.95%	12,965				
FY 2010-11	81,114	8.38%	6,275				
FY 2011-12	93,224	14.93%	12,110				
FY 2012-13	99,392	6.62%	6,168				
FY 2013-14	124,680	25.44%	25,288				
FY 2014-15	161,682	29.68%	37,002	N	ovember 201	6 Projection	
FY 2015-16	163,342	1.03%	1,660	FY 2015-16	163,342	1.03%	1,660
FY 2016-17	157,233	-3.74%	(6,109)	FY 2016-17	185,524	13.58%	22,182
FY 2017-18	170,189	8.24%	12,956	FY 2017-18	189,828	2.32%	4,304
FY 2018-19	180,758	6.21%	10,569	FY 2018-19	194,251	2.33%	4,423

November 2016 Projection						
FY 2015-16	163,342	1.03%	1,660			
FY 2016-17	185,524	13.58%	22,182			
FY 2017-18	189,828	2.32%	4,304			
FY 2018-19	194,251	2.33%	4,423			

Parents/Caretakers Rule Change					
FY 2015-16	0				
FY 2016-17	235				
FY 2017-18	1,240				
FY 2018-19	1,989				

Parents/Caretakers Rule Change		
FY 2015-16	0	
FY 2016-17	4,745	
FY 2017-18	7,225	
FY 2018-19	7,973	

Annualized Income

2,048

2,127

2,209

FY 2015-16 FY 2016-17

FY 2017-18

FY 2018-19

November 2016 Forecast		F
Forecasted December 2016 Level	191,201	F
		E

Base trend from December 2016 level			
FY 2016-17	155,182	-5.00%	(8,160)

Actuals			
	Monthly	%	
	Change	Change	
6-month average	746	0.49%	
12-month average	(494)	-0.30%	
18-month average	(709)	-0.42%	
24-month average	(232)	-0.14%	

Annualized Income		
FY 2015-16	0	
FY 2016-17	24	
FY 2017-18	127	
FY 2018-19	209	
1 1 2010 17	20)	

Transitional Medicaid System Correction		
FY 2015-16	0	
FY 2016-17	6,969	
FY 2017-18	20,907	
FY 2018-19	20,907	

February 2017 Projections After Adjustments				
FY 2015-16	163,342	1.03%	1,660	
FY 2016-17	164,461	0.69%	1,119	
FY 2017-18	192,463	17.03%	28,002	
FY 2018-19	203,863	5.92%	11,400	

Transitional Medicaid System Correction		
FY 2015-16	0	
FY 2016-17	0	
FY 2017-18	0	
FY 2018-19	0	

November 2016 Projection After Adjustments				
FY 2015-16	163,342	1.03%	1,660	
FY 2016-17	192,317	17.74%	28,975	
FY 2017-18	199,180	3.57%	6,863	
FY 2018-19	204,433	2.64%	5,253	

Monthly Average Growth Actuals				
FY 2010-11 1st Half	1,194	1.58%		
FY 2010-11 2nd Half	1,342	1.62%		
FY 2010-11	1,268	1.60%		
FY 2011-12 1st Half	1,159	1.28%		
FY 2011-12 2nd Half	557	0.60%		
FY 2011-12	858	0.94%		
FY 2012-13 1st Half	(56)	-0.03%		
FY 2012-13 2nd Half	1,832	1.80%		
FY 2012-13	888	0.89%		
FY 2013-14 1st Half	1,844	1.67%		
FY 2013-14 2nd Half	4,952	3.78%		
FY 2013-14	3,398	2.73%		
FY 2014-15 1st Half	2,197	1.43%		
FY 2014-15 2nd Half	1,198	0.73%		
FY 2014-15	1,697	1.08%		
FY 2015-16 1st Half	(1,137)	-0.68%		
FY 2015-16 2nd Half	(1,735)	-1.08%		
FY 2015-16	(1,436)	-0.88%		

Monthly Average Growth Comparisons					
Dannat	Monthly Change		Percent Change		
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	6,420	746	3.83%	0.49%	
FY 2016-17 2nd Half	5,139	4,758	2.52%	2.93%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	10,813	N/A	6.57%	
FY 2016-17	5,779	2,752	3.18%	1.71%	
FY 2017-18 1st Half	(3,516)	1,055	-1.65%	0.56%	
FY 2017-18 2nd Half	(3,524)	970	-1.84%	0.50%	
FY 2017-18	(3,520)	1,012	-1.74%	0.53%	
FY 2018-19 1st Half	3,792	923	2.01%	0.46%	
FY 2018-19 2nd Half	3,778	922	1.78%	0.45%	
FY 2018-19	3,785	923	1.89%	0.45%	

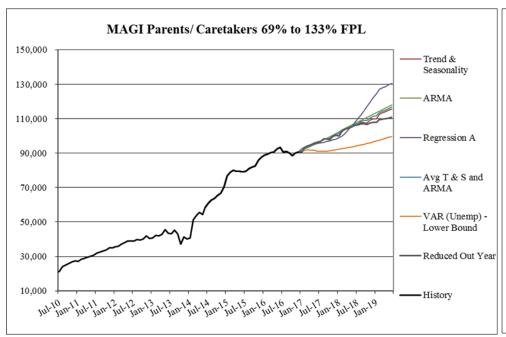
## MAGI Parents/Caretakers 69% to 133% FPL

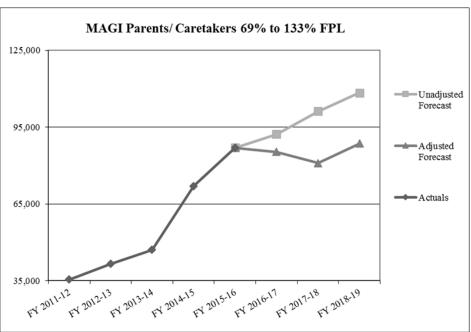
HB 09-1293 (Colorado Health Care Affordability Act) allowed for expanding Medicaid eligibility to parents of children enrolled in either Medicaid or the Children's Basic Health Plan up to 100% of the federal poverty level (FPL). The increase in the percentage of allowable federal poverty level was implemented on May 1, 2010. Medicaid Expansion SB 13-200 further expanded this population to 133% and the Department has changed the category Expansion Adults to 100% FPL to MAGI Parents/Caretakers 69% to 133% FPL to track these clients.

## 25.5-5-201 (1), C.R.S.

(m) Parents and caretaker relatives of children who are eligible for the medical assistance program whose family income does not exceed one hundred thirty-three percent of the federal poverty line, adjusted for family size;

## MAGI Parents/Caretakers 69% to 133% FPL: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	PC 69-133%	Constant, trend, and seasonal dummy variables	20.84	20.43	0.9333
ARMA	d(PC 69-133%)	Constant, AR(1), AR(2), AR(3), MA(1), MA(2)	18.12	18	0.0563
Regression A	dlog(PC 69- 133%)	Constant, dlog(unemployment), and 1 lag on the dependent variable	-3.29	-3.5	0.0284
Avg T & S and ARMA			NA	NA	NA
Reduced Out Year			NA	NA	NA
VAR (Unemp) - Lower Bound			NA	NA	NA

	MAGI Parents	s/ Caretakers 69% to 133	% FPL: Model I	Results <sup>1</sup>		
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	71,989	86,964	6.01%	92,191	5,227	4,481
ARMA	71,989	86,964	5.74%	91,956	4,992	4,447
Regression A	71,989	86,964	6.08%	92,251	5,287	4,402
Avg T & S and ARMA	71,989	86,964	5.88%	92,077	5,113	4,464
Reduced Out Year	71,989	86,964	6.01%	92,191	5,227	4,481
VAR (Unemp) - Lower Bound	71,989	86,964	4.46%	90,843	3,879	4,043

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	86,964	92,191	9.75%	101,180	8,989	802
ARMA	86,964	91,956	10.91%	101,988	10,032	913
Regression A	86,964	92,251	8.27%	99,880	7,629	992
Avg T & S and ARMA	86,964	92,077	10.33%	101,589	9,512	857
Reduced Out Year	86,964	92,191	9.75%	101,180	8,989	802
VAR (Unemp) - Lower Bound	86,964	90,843	1.56%	92,260	1,417	223

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	92,191	101,180	9.51%	110,802	9,622	802
ARMA	91,956	101,988	10.79%	112,993	11,005	916
Regression A	92,251	99,880	22.15%	122,003	22,123	1,924
Avg T & S and ARMA	92,077	101,589	10.15%	111,900	10,311	859
Reduced Out Year	92,191	101,180	7.17%	108,435	7,255	394
VAR (Unemp) - Lower Bound	90,843	92,260	5.02%	96,891	4,631	482

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### MAGI Parents/Caretakers 69% to 133% FPL: Trend Selections

FY 2016-17: -1.89% FY 2017-18: -5.08% FY 2018-19: 9.42%

### MAGI Parents/Caretakers 69% to 133% FPL: Justifications and Monthly Projections

- Average monthly caseload in FY 2015-16 for MAGI Parents/Caretakers 69% to 133% FPL was 86,964, which was likely inflated due to a system error that incorrectly moved clients from MAGI Parents/Caretakers to 68% FPL to this category. This system error will be resolved March 2017. FY 2016-17 actual average monthly growth for the first half of the fiscal year was -430, driven by July 2016, September 2016, and October 2016, during which time periods, caseload overall also fell; the Department has brought down the forecast accordingly.
- Previously, the Department accounted for the expansion from 100% FPL to 133% FPL under SB 13-200 Medicaid Expansion as a bottom-line adjustment. Beginning in November 2016, the Department has determined that there are now sufficient data points to forecast this expansion within statistical models, and has adjusted the forecast accordingly. In FY 2015-16, the average monthly caseload attributable to this expansion was 39,000.
- There are two bottom-line adjustments for this eligibility. The first accounts for the impact of annualized income beginning July 1, 2016. Annualized income allows individuals with seasonal fluctuations in income to remain eligible throughout the year so long as their income, annualized for the year, meets Medicaid qualification requirements. This adjustment was reduced in the current forecast, due to the impact already partially included in the trend. The second bottom-line adjustment moves clients from this category to MAGI Parents/Caretakers to 68% to account for the March 2017 fix of the system issue that has been incorrectly placing clients in this category instead.

	Actuals	Monthly	%
	Actuals	Change	Change
Dec-14	70,288	-	
Jan-15	76,807	6,519	9.27%
Feb-15	78,910	2,103	2.74%
Mar-15	80,068	1,158	1.47%
Apr-15	79,437	(631)	-0.79%
May-15	79,417	(20)	-0.03%
Jun-15	79,036	(381)	-0.48%
Jul-15	79,502	466	0.59%
Aug-15	81,001	1,499	1.89%
Sep-15	82,010	1,009	1.259
Oct-15	82,642	632	0.779
Nov-15	85,784	3,142	3.80%
Dec-15	87,548	1,764	2.069
Jan-16	88,891	1,343	1.53%
Feb-16	89,610	719	0.819
Mar-16	90,244	634	0.719
Apr-16	90,644	400	0.44%
May-16	92,385	1,741	1.92%
Jun-16	93,307	922	1.00%
Jul-16	90,622	(2,685)	-2.889
Aug-16	91,044	422	0.479
Sep-16	90,010	(1,034)	-1.149
Oct-16	88,537	(1,473)	-1.64%
Nov-16	90,158	1,621	1.839
Dec-16	90,730	572	0.639

			MAGI	Parents/ Caretak	ers 69% to	133% FPL:	Historical C	aseload and Proj
	Caseload	% Change	Level Change					
FY 2009-10	3,238	-	-					
FY 2010-11	27,167	7	23,929					
FY 2011-12	35,461	30.53%	8,294					
FY 2012-13	41,545	17.16%	6,084					
FY 2013-14	47,082	13.33%	5,537					
FY 2014-15	71,989	52.90%	24,907	November 2	016 Project	ion Before A	djustments	
FY 2015-16	86,964	20.80%	14,975	FY 2015-16	86,964	20.80%	14,975	
FY 2016-17	92,191	6.01%	5,227	FY 2016-17	97,721	12.37%	10,757	
FY 2017-18	101,180	9.75%	8,989	FY 2017-18	107,112	9.61%	9,391	
FY 2018-19	108,435	7.17%	7,255	FY 2018-19	114,278	6.69%	7,166	

Annualized Income

95

709

1,083

14,975

(1,647)

(4,335)

7,629

FY 2015-16 FY 2016-17

FY 2017-18

FY 2018-19

FY 2015-16

FY 2016-17

FY 2017-18

FY 2018-19

November 2	2016 Project	ion Before A	djustments
FY 2015-16	86,964	20.80%	14,975
FY 2016-17	97,721	12.37%	10,757
FY 2017-18	107,112	9.61%	9,391
FY 2018-19	114,278	6.69%	7,166

	Annualiz	ed Income
FY 2015-16		
FY 2016-17	•	
FY 2017-18		
FY 2018-19		

Monthly Averag	e Growth Act	uals
FY 2010-11 1st Half	1,165	5.04%
FY 2010-11 2nd Half	521	1.82%
FY 2010-11	843	3.43%
FY 2011-12 1st Half	694	2.15%
FY 2011-12 2nd Half	673	1.85%
FY 2011-12	683	2.00%
FY 2012-13 1st Half	254	0.67%
FY 2012-13 2nd Half	526	1.31%
FY 2012-13	390	0.99%
FY 2013-14 1st Half	(562)	-1.01%
FY 2013-14 2nd Half	3,054	6.82%
FY 2013-14	1,246	2.90%
FY 2014-15 1st Half	1,957	3.10%
FY 2014-15 2nd Half	1,458	2.03%
FY 2014-15	1,707	2.57%
FY 2015-16 1st Half	1,419	1.72%
FY 2015-16 2nd Half	960	1.07%
FY 2015-16	1,189	1.40%

	)8% -133% PL
Dec-14	27,899
Jan-15	32,386
Feb-15	33,639
Mar-15	34,192
Apr-15	33,388
May-15	33,604
Jun-15	33,774
Jul-15	34,351
Aug-15	35,405
Sep-15	36,104
Oct-15	35,942
Nov-15	38,550
Dec-15	39,399
Jan-16	40,169
Feb-16	40,524
Mar-16	41,180
Apr-16	41,474
May-16	42,181
Jun-16	42,721
Jul-16	41,167
Aug-16	41,694
Sep-16	41,121
Oct-16	39,993
Nov-16	40,536
Dec-16	41,549

Transitional Medicaid	System Correction
FY 2015-16	0
FY 2016-17	(6,969)
FY 2017-18	(20,907)
FY 2018-19	(20,907)

February 2017 Projections After Adjustments

20.80%

-1.89%

-5.08%

9.42%

86,964

85,317

80,982

88,611

Transitional Medicai	d System Correction
FY 2015-16	0
FY 2016-17	0
FY 2017-18	0
FY 2018-19	0

November	2016 Projec	tion After Ac	ljustments
FY 2015-16	86,964	20.80%	14,975
FY 2016-17	98,910	13.74%	11,946
FY 2017-18	108,821	10.02%	9,911
FY 2018-19	116,361	6.93%	7,540

Monthly Average Growth Comparisons					
ъ.	Monthly	Change	Percent Change		
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	815	(430)	0.86%	-0.45%	
FY 2016-17 2nd Half	949	(2,492)	0.95%	-2.55%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	2,194	N/A	2.57%	
FY 2016-17	882	(1,461)	0.90%	-1.50%	
FY 2017-18 1st Half	703	731	0.67%	0.95%	
FY 2017-18 2nd Half	948	959	0.86%	1.17%	
FY 2017-18	826	845	0.77%	1.06%	
FY 2018-19 1st Half	370	384	0.32%	0.44%	
FY 2018-19 2nd Half	463	466	0.40%	0.52%	
FY 2018-19	416	425	0.36%	0.48%	

November 2016 Forecast	
Forecasted December 2016 Level	98,200

Base trend from December 2016 level			
FY 2016-17	90,457	4.02%	3,493

Actuals				
	Monthly Change	% Change		
6-month average	(430)	-0.45%		
12-month average	265	0.31%		
18-month average	650	0.78%		
24-month average	852	1.09%		

### **MAGI Adults**

HB 09-1293 (Colorado Health Care Affordability Act) authorizes the Department to expand Medicaid eligibility to Adults without Dependent Children (AwDC), now referred to as MAGI Adults, age 19 to 65 who are not eligible for Medicaid or Medicare with income up to 100% of the federal poverty level (FPL). The Department implemented the first stage of this expansion in May 2012, in which enrollment initially opened to individuals with income up to 10% FPL and enrollment was limited to 10,000.

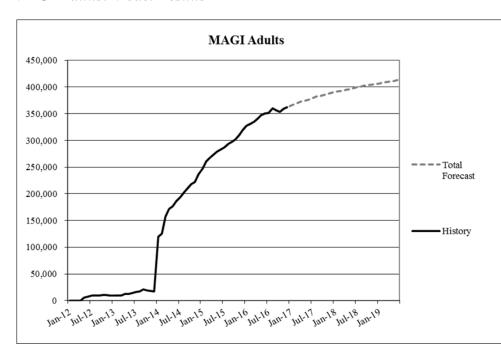
Due to the availability of funding in the FFY 2012-13 Hospital Provider Fee model, the Department planned to gradually increase the number of MAGI Adults served under 10% FPL in FY 2012-13 and FY 2013-14. The Department intended to enroll an additional 3,000 individuals from the wait list in April 2013, followed by 1,250 additional individuals per month from May through September 2013, setting the enrollment cap at 19,250 clients.

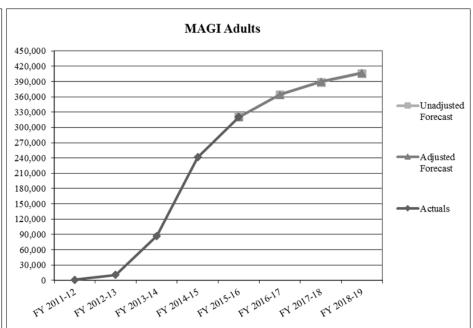
Beginning in January 2014, this enrollment cap was lifted under SB 13-200 Medicaid expansion, and the FPL for this category was extended through 133%. Aggressive growth has been seen for this eligibility since the implementation of Medicaid expansion.

25.5-5-201 (1), C.R.S.

(p) Subject to federal approval, adults who are childless or without a dependent child in the home, as described in section 1902 (a) (10) (A) (i) (VIII) of the social security act, 42 U.S.C. sec. 1396a, who have attained nineteen years of age but have not attained sixty-five years of age, and whose family income does not exceed one hundred thirty-three percent of the federal poverty line, adjusted for family size;

## MAGI Adults: Model Results





	MAGI Adults: Model Results <sup>1</sup>					
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	241,392	320,374	13.73%	364,350	43,976	31,403
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	320,374	364,350	6.89%	389,466	25,116	1,712
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	364,350	389,466	4.39%	406,575	17,109	1,290

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### MAGI Adults: Trend Selections

FY 2016-17: 13.73% FY 2017-18: 6.89% FY 2018-19: 4.39%

### MAGI Adults: Justifications and Monthly Projections

- Average monthly caseload in FY 2015-16 for MAGI Adults was 320,374. The average monthly growth in the first half of FY 2016-17 was approximately 1,966, with the December 2016 data point coming in 355 lower than anticipated in the November 2016 request. The Department has kept the caseload estimate in FY 2016-17 roughly the same, lowered slightly to account for this, but does believe these growth trends will begin to slow down in FY 2017-18 and FY 2018-19.
- Beginning with the November 2015 forecast, the Department has selected models separately for the age group 19-44 and the age group 45-64. See below for more details.
- This forecast has two bottom-line adjustments.
  - O The first accounts for a rule change that begins in November 2016. The Department received clarification from CMS that there are no requirements regarding dependent child enrollment in Medicaid in order for MAGI Parents/Caretakers to 68% FPL to have Medicaid eligibility, but there is a requirement that dependent children be enrolled in minimum essential coverage (MEC) in order for MAGI Parents/Caretakers 69-133% FPL or MAGI Adults to have Medicaid eligibility. This bottom-line adjustment accounts for client movement from this eligibility category to MAGI Parents/Caretakers to 68% FPL, based on this change. This bottom-line adjustment has been adjusted to account for the majority of the effect already being incorporated in the trend.
  - o The second adjustment accounts for the impact of annualized income beginning July 1, 2016. Annualized income allows individuals with seasonal fluctuations in income to remain eligible throughout the year so long as their income, annualized for the year, meets Medicaid qualification requirements. This bottom-line adjustment has been adjusted to account for the majority of the effect already being incorporated in the trend.

	Actuals	Monthly Change	% Change
Dec-14	237,045	-	-
Jan-15	247,056	10,011	4.22%
Feb-15	261,108	14,052	5.69%
Mar-15	267,714	6,606	2.53%
Apr-15	273,043	5,329	1.99%
May-15	278,709	5,666	2.08%
Jun-15	282,910	4,201	1.51%
Jul-15	287,183	4,273	1.51%
Aug-15	293,155	5,972	2.08%
Sep-15	297,680	4,525	1.54%
Oct-15	302,362	4,682	1.57%
Nov-15	310,294	7,932	2.62%
Dec-15	320,093	9,799	3.16%
Jan-16	327,653	7,560	2.36%
Feb-16	331,622	3,969	1.21%
Mar-16	335,451	3,829	1.15%
Apr-16	340,862	5,411	1.61%
May-16	347,731	6,869	2.02%
Jun-16	350,396	2,665	0.77%
Jul-16	351,908	1,512	0.43%
Aug-16	359,971	8,063	2.29%
Sep-16	356,125	(3,846)	-1.07%
Oct-16	353,370	(2,755)	-0.77%
Nov-16	358,986	5,616	1.59%
Dec-16	362,193	3,207	0.89%

November 2016 Forecast		
Forecasted December 2016 Level	362,548	

Base trend from December 2016 level			
FY 2016-17	359,643	12.26%	39,269

Actuals				
	Monthly Change	% Change		
6-month average	1,966	0.56%		
12-month average	3,508	1.04%		
18-month average	4,405	1.39%		
24-month average	5,215	1.79%		

MAGI Adults: Historical Caseload and Projection					Projections	
	Caseload	%	Level			
	Cascidad	Change	Change			
FY 2011-12	1,134	1	-			
FY 2012-13	10,634	8	9,500			
FY 2013-14	87,243	720.42%	76,609			
FY 2014-15	241,392	176.69%	154,149	N	November 20	16 Projection
FY 2015-16	320,374	32.72%	78,982	FY 2015-16	320,374	32.72%
FY 2016-17	364,464	13.76%	44,090	FY 2016-17	368,262	14.95%
FY 2017-18	388,689	6.65%	24,225	FY 2017-18	394,629	7.16%
FY 2018-19	405,565	4.34%	16,876	FY 2018-19	408,636	3.55%

Parents/Caretakers Rule Change			
FY 2015-16	0		
FY 2016-17	(235)		
FY 2017-18	(1,240)		
FY 2018-19	(1,989)		

Annualized Income		
FY 2015-16	0	
FY 2016-17	121	
FY 2017-18	2,017	
FY 2018-19	2,999	

February 2017 Projections After Adjustments					
FY 2015-16	320,374	32.72%	78,982		
FY 2016-17	364,350	13.73%	43,976		
FY 2017-18	389,466	6.89%	25,116		
FY 2018-19	406,575	4.39%	17,109		

November 2016 Projection					
FY 2015-16	320,374	32.72%	78,982		
FY 2016-17	368,262	14.95%	47,888		
FY 2017-18	394,629	7.16%	26,367		
FY 2018-19	408,636	3.55%	14,007		

Parents/Caretakers Rule Change			
FY 2015-16	0		
FY 2016-17	(4,745)		
FY 2017-18	(7,225)		
FY 2018-19	(7,973)		

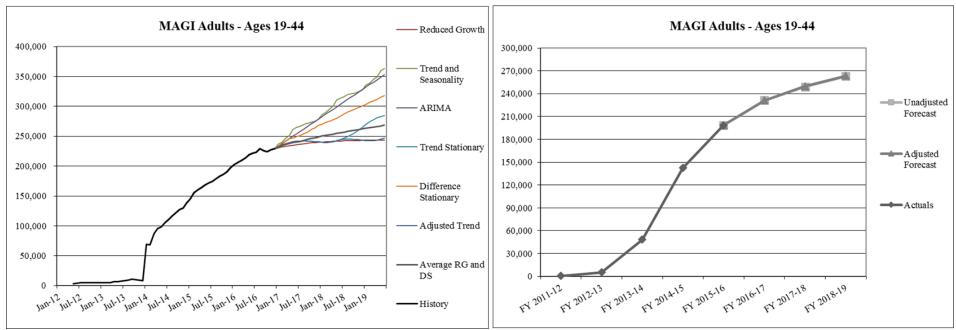
Annualize	ed Income
FY 2015-16	0
FY 2016-17	2,692
FY 2017-18	4,467
FY 2018-19	5,449

November 2016 Projection After Adjustments					
FY 2015-16	320,374	32.72%	78,982		
FY 2016-17	366,209	14.31%	45,835		
FY 2017-18	391,871	7.01%	25,662		
FY 2018-19	406,112	3.63%	14,241		

Monthly Average Growth Actuals				
FY 2010-11 1st Half	0	-		
FY 2010-11 2nd Half	0	-		
FY 2010-11	0	-		
FY 2011-12 1st Half	0	-		
FY 2011-12 2nd Half	1,292	_		
FY 2011-12	646	-		
FY 2012-13 1st Half	341	4.34%		
FY 2012-13 2nd Half	829	7.58%		
FY 2012-13	585	5.96%		
FY 2013-14 1st Half	387	2.97%		
FY 2013-14 2nd Half	28,329	108.64%		
FY 2013-14	14,358	55.81%		
FY 2014-15 1st Half	8,374	4.06%		
FY 2014-15 2nd Half	7,644	3.00%		
FY 2014-15	8,009	3.53%		
FY 2015-16 1st Half	6,197	2.08%		
FY 2015-16 2nd Half	5,051	1.52%		
FY 2015-16	5,624	1.80%		

Monthly Average Growth Comparisons					
Dogwood	Monthly Change		Percent Change		
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	2,025	1,966	0.57%	0.56%	
FY 2016-17 2nd Half	2,888	2,464	0.78%	0.67%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	2,947	N/A	0.81%	
FY 2016-17	2,457	2,215	0.68%	0.61%	
FY 2017-18 1st Half	1,629	2,088	0.42%	0.55%	
FY 2017-18 2nd Half	2,200	1,335	0.56%	0.34%	
FY 2017-18	1,915	1,712	0.49%	0.44%	
FY 2018-19 1st Half	452	1,426	0.11%	0.36%	
FY 2018-19 2nd Half	523	1,155	0.13%	0.28%	
FY 2018-19	487	1,290	0.12%	0.32%	

# MAGI Adults, Age 19 to 44: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Reduced Growth			NA	NA	NA
Trend and Seasonality	Adults 19-44	Constant, January 2014 dummy, trend, seasonal dummy variables	23.05	22.54	0.9615
ARIMA	d(Adults 19-44)	Constant, AR(1), MA(1)	21.20	21.06	-0.0454
Trend Stationary	log(Adults 19- 44)	Constant, trend, 1 lag on the dependent variable	-4.87	-5.18	0.9974
Difference Stationary	dlog(Adults 19- 44)	Constant, 2 lags on the dependent variable	17.61	16.81	0.5800
Average RG and DS			NA	NA	NA
Adjusted Trend			NA	NA	NA

MAGI Adults Age 19-44: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Reduced Growth	142,485	198,654	15.74%	229,922	31,268	1,200
Trend and Seasonality	142,485	198,654	19.93%	238,246	39,592	3,579
ARIMA	142,485	198,654	18.30%	235,008	36,354	2,692
Trend Stationary	142,485	198,654	16.84%	232,107	33,453	1,655
Difference Stationary	142,485	198,654	18.00%	234,412	35,758	2,343
Average RG and DS	142,485	198,654	16.49%	231,412	32,758	1,581
Adjusted Trend	142,485	198,654	16.84%	232,107	33,453	1,655
FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Reduced Growth	198,654	229,922	4.29%	239,786	9,864	487
Trend and Seasonality	198,654	238,246	20.04%	285,990	47,744	4,109
ARIMA	198,654	235,008	19.45%	280,717	45,709	4,121
Trend Stationary	198,654	232,107	3.96%	241,298	9,191	232
Difference Stationary	198,654	234,412	14.33%	268,003	33,591	2,840
Average RG and DS	198,654	231,412	7.68%	249,184	17,772	1,271
Adjusted Trend	198,654	232,107	3.96%	241,298	9,191	232
FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Reduced Growth	229,922	239,786	1.32%	242,951	3,165	140
TF 1 1.0 11.	220.246	205.000	17.040/	225 205	40.205	4 100

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Reduced Growth	229,922	239,786	1.32%	242,951	3,165	140
Trend and Seasonality	238,246	285,990	17.24%	335,295	49,305	4,109
ARIMA	235,008	280,717	17.61%	330,151	49,434	4,120
Trend Stationary	232,107	241,298	10.57%	266,803	25,505	3,361
Difference Stationary	234,412	268,003	12.82%	302,361	34,358	2,845
Average RG and DS	231,412	249,184	5.44%	262,740	13,556	1,041
Adjusted Trend	232,107	241,298	1.15%	244,073	2,775	232

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# MAGI Adults, Age 19 to 44: Trend Selections

FY 2016-17: 16.44% FY 2017-18: 8.00% FY 2018-19: 5.50%

### MAGI Adults, Age 19 to 44: Justifications and Monthly Projections

Beginning with the November 2015 forecast, the Department has begun estimating this eligibility category with two age group sub-categories, to increase forecast accuracy. For FY 2015-16, caseload continued to grow quickly with an average monthly growth of 4,173 clients. However, average monthly growth in the first half of FY 2016-17 was 1,239. The Department has adjusted its forecast downward from the November 2016 level accordingly.

	Actuals	Monthly Change	% Change
Dec-14	138,826	-	
Jan-15	145,634	6,808	4.90%
Feb-15	155,316	9,682	6.65%
Mar-15	160,040	4,724	3.04%
Apr-15	164,179	4,139	2.59%
May-15	168,459	4,280	2.61%
Jun-15	171,555	3,096	1.84%
Jul-15	174,715	3,160	1.84%
Aug-15	179,112	4,397	2.52%
Sep-15	182,607	3,495	1.95%
Oct-15	186,043	3,436	1.88%
Nov-15	190,977	4,934	2.65%
Dec-15	197,562	6,585	3.45%
Jan-16	202,980	5,418	2.74%
Feb-16	206,305	3,325	1.64%
Mar-16	209,283	2,978	1.44%
Apr-16	213,512	4,229	2.02%
May-16	219,122	5,610	2.63%
Jun-16	221,633	2,511	1.15%
Jul-16	222,886	1,253	0.57%
Aug-16	228,842	5,956	2.67%
Sep-16	226,134	(2,708)	-1.18%
Oct-16	223,839	(2,295)	-1.01%
Nov-16	227,446	3,607	1.61%
Dec-16	229,067	1,621	0.71%

November 2016 Forecast				
Forecasted December 2016 Level	230,978			

Base trend from December 2016 level					
FY 2016-17	227,718	14.63%	29,064		

Actuals				
	Monthly Change	% Change		
6-month average	1,239	0.56%		
12-month average	2,625	1.25%		
18-month average	3,195	1.63%		
24-month average	3,760	2.12%		

		MA	Ages 19-44: Histor	rical Caseloa	nd and Projec	tion	
	Caseload	% Change	Level Change				
FY 2011-12	539	-	-				
FY 2012-13	5,261	9	4,722				
FY 2013-14	48,325	818.55%	43,064				
FY 2014-15	142,485	194.85%	94,160	November 2	2016 Project	ion Before A	dju
FY 2015-16	198,654	39.42%	56,169	FY 2015-16	198,654	39.42%	
FY 2016-17	231,412	16.49%	32,758	FY 2016-17	236,001	18.80%	
FY 2017-18	249,184	7.68%	17,772	FY 2017-18	258,704	9.62%	
FY 2018-19	262,740	5.44%	13,556	FY 2018-19	271,148	4.81%	

Parents/Caretakers Rule Change			
FY 2015-16	0		
FY 2016-17	(191)		
FY 2017-18	(1,010)		
FY 2018-19	(1,619)		

Annualized Income				
FY 2015-16	0			
FY 2016-17	96			
FY 2017-18	1,637			
FY 2018-19	2,437			

February 2017 Projections After Adjustments					
FY 2015-16	198,654	39.42%	56,169		
FY 2016-17	231,317	16.44%	32,663		
FY 2017-18	249,811	8.00%	18,494		
FY 2018-19	263,558	5.50%	13,747		

November 2016 Projection Before Adjustments					
FY 2015-16	198,654	39.42%	56,169		
FY 2016-17	236,001	18.80%	37,347		
FY 2017-18	258,704	9.62%	22,703		
FY 2018-19	271,148	4.81%	12,444		

Parents/Caretakers Rule Change			
FY 2015-16	0		
FY 2016-17	(3,863)		
FY 2017-18	(5,883)		
FY 2018-19	(6,492)		

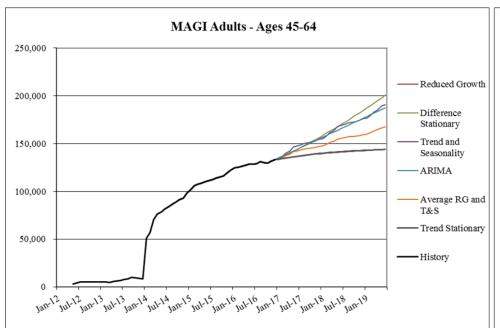
Annualized Income			
FY 2015-16	0		
FY 2016-17	2,192		
FY 2017-18	3,637		
FY 2018-19	4,437		

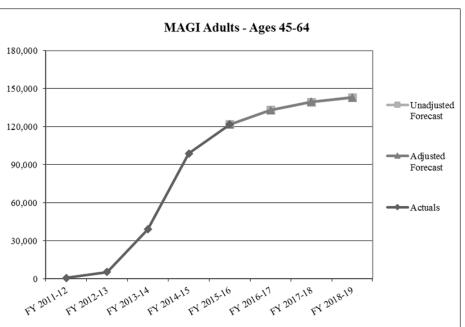
November 2016 Projection After Adjustments					
FY 2015-16	198,654	39.42%	56,169		
FY 2016-17	234,330	17.96%	35,676		
FY 2017-18	256,458	9.44%	22,128		
FY 2018-19	269,093	4.93%	12,635		

Monthly Average	e Growth Ac	tuals
FY 2010-11 1st Half	0	-
FY 2010-11 2nd Half	0	-
FY 2010-11	0	-
FY 2011-12 1st Half	0	-
FY 2011-12 2nd Half	621	-
FY 2011-12	311	-
FY 2012-13 1st Half	166	4.42%
FY 2012-13 2nd Half	495	9.15%
FY 2012-13	330	6.78%
FY 2013-14 1st Half	155	2.53%
FY 2013-14 2nd Half	16,098	124.83%
FY 2013-14	8,127	63.68%
FY 2014-15 1st Half	5,603	4.74%
FY 2014-15 2nd Half	5,455	3.60%
FY 2014-15	5,529	4.17%
FY 2015-16 1st Half	4,335	2.38%
FY 2015-16 2nd Half	4,012	1.94%
FY 2015-16	4,173	2.16%
•		

Monthly Average Growth Comparisons					
D	Monthly	Change	Percent	Change	
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	1,557	1,239	0.70%	0.56%	
FY 2016-17 2nd Half	2,531	1,863	1.07%	0.80%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	2,849	N/A	1.23%	
FY 2016-17	2,044	1,551	0.88%	0.68%	
FY 2017-18 1st Half	1,347	1,612	0.54%	0.66%	
FY 2017-18 2nd Half	2,057	1,032	0.79%	0.41%	
FY 2017-18	1,702	1,322	0.67%	0.53%	
FY 2018-19 1st Half	326	1,166	0.12%	0.45%	
FY 2018-19 2nd Half	463	980	0.17%	0.37%	
FY 2018-19	395	1,073	0.15%	0.41%	

# MAGI Adults, Age 45 to 64: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Reduced Growth			NA	NA	NA
Trend and Seasonality	Adults 45+	Constant, January 2014 dummy, trend, seasonal dummy variables	21.65	21.14	0.9733
ARIMA	d(Adults 45+)	Constant, AR(1), MA(1)	17.43	17.25	0.1100
Trend Stationary	log(Adults 45+)	Constant, trend, 2 lags on the dependent variable	-6.13	-6.27	0.9954
Difference Stationary	dlog(Adults 45+)	Constant, 1 lag on the dependent variable	-5.72	-5.95	0.3309
Average RG and T&S			NA	NA	NA

MAGI Adults Age 45-64: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Reduced Growth	98,907	121,720	9.32%	133,064	11,344	692
Trend and Seasonality	98,907	121,720	11.64%	135,888	14,168	1,586
ARIMA	98,907	121,720	11.01%	135,121	13,401	1,274
Trend Stationary 98,907 121,720 9.31% 133,052 11,332 676					670	
Difference Stationary	98,907	121,720	10.97%	135,073	13,353	1,280
Average RG and T&S	98,907	121,720	10.48%	134,476	12,756	1,139

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Reduced Growth	121,720	133,064	5.21%	139,997	6,933	400
Trend and Seasonality	121,720	135,888	15.60%	157,087	21,199	1,799
ARIMA	121,720	135,121	15.31%	155,808	20,687	1,810
Trend Stationary	121,720	133,052	4.85%	139,505	6,453	379
Difference Stationary	121,720	135,073	16.81%	157,779	22,706	2,157
Average RG and T&S	121,720	134,476	10.46%	148,542	14,066	1,099

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Reduced Growth	133,064	139,997	2.24%	143,133	3,136	172
Trend and Seasonality	135,888	157,087	13.74%	178,671	21,584	1,799
ARIMA	135,121	155,808	13.94%	177,528	21,720	1,810
Trend Stationary	133,052	139,505	2.38%	142,825	3,320	210
Difference Stationary	135,073	157,779	18.03%	186,227	28,448	2,557
Average RG and T&S	134,476	148,542	8.32%	160,901	12,359	985

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## MAGI Adults, Age 45-64: Trend Selections

FY 2016-17: 9.29% FY 2017-18: 4.98% FY 2018-19: 2.41%

## MAGI Adults, Age 45-64: Justifications and Monthly Projections

Beginning with the November 2015 forecast, the Department has begun estimating this eligibility category with two age group sub-categories, to increase forecast accuracy. Average monthly growth in FY 2015-16 was 1,451 clients. Average monthly growth in the first half of FY 2016-17 was 727, and the December 2016 data point was approximately 1,500 higher than the predicted December caseload in the November 2016 request; the Department has increased the forecast in comparison to the previous estimates accordingly.

	1		1
	Actuals	Monthly Change	% Change
Dec-14	98,219	-	-
Jan-15	101,422	3,203	3.26%
Feb-15	105,792	4,370	4.31%
Mar-15	107,674	1,882	1.78%
Apr-15	108,864	1,190	1.11%
May-15	110,250	1,386	1.27%
Jun-15	111,355	1,105	1.00%
Jul-15	112,468	1,113	1.00%
Aug-15	114,043	1,575	1.40%
Sep-15	115,073	1,030	0.90%
Oct-15	116,319	1,246	1.08%
Nov-15	119,317	2,998	2.58%
Dec-15	122,531	3,214	2.69%
Jan-16	124,673	2,142	1.75%
Feb-16	125,317	644	0.52%
Mar-16	126,168	851	0.68%
Apr-16	127,350	1,182	0.94%
May-16	128,609	1,259	0.99%
Jun-16	128,763	154	0.12%
Jul-16	129,022	259	0.20%
Aug-16	131,129	2,107	1.63%
Sep-16	129,991	(1,138)	-0.87%
Oct-16	129,531	(460)	-0.35%
Nov-16	131,540	2,009	1.55%
Dec-16	133,126	1,586	1.21%

November 2016 Forecas	t
Forecasted December 2016 Level	131,570

Base trend from December 2016 level				
FY 2016-17	131,925	8.38%	10,205	

Actuals					
	Monthly Change	% Change			
6-month average	727	0.56%			
12-month average	883	0.70%			
18-month average	1,210	1.00%			
24-month average	1,454	1.28%			

	MAGI Adults Ages 45-64: Historical Caseload and Projection						
	Caseload	% Change	Level Change				
FY 2011-12	595	-	-				
FY 2012-13	5,373	8	4,778				
FY 2013-14	38,918	624.33%	33,545				
FY 2014-15	98,907	154.14%	59,989	November 2	016 Project	ion Before A	djustm
FY 2015-16	121,720	23.07%	22,813	FY 2015-16	121,720	23.07%	22
FY 2016-17	133,052	9.31%	11,332	FY 2016-17	132,261	8.66%	10
FY 2017-18	139,505	4.85%	6,453	FY 2017-18	135,925	2.77%	
FY 2018-19	142,825	2.38%	3,320	FY 2018-19	137,488	1.15%	

Parents/Caretakers	Rule Change
FY 2015-16	0
FY 2016-17	(44)
FY 2017-18	(230)
FY 2018-19	(370)

Annualized l	íncome
FY 2015-16	0
FY 2016-17	25
FY 2017-18	380
FY 2018-19	562

February 2017 Projections After Adjustments					
FY 2015-16	121,720	23.07%	22,813		
FY 2016-17	133,033	9.29%	11,313		
FY 2017-18	139,655	4.98%	6,622		
FY 2018-19	143,017	2.41%	3,362		

November 2016 Projection Before Adjustments					
FY 2015-16	121,720	23.07%	22,813		
FY 2016-17	132,261	8.66%	10,541		
FY 2017-18	135,925	2.77%	3,664		
FY 2018-19	137,488	1.15%	1,563		

Parents/Caretakers Rule Change				
FY 2015-16	0			
FY 2016-17	(882)			
FY 2017-18	(1,342)			
FY 2018-19	(1,481)			

Annualized Income					
FY 2015-16	0				
FY 2016-17	500				
FY 2017-18	830				
FY 2018-19	1,012				

November 2016 Projection After Adjustments						
FY 2015-16	121,720	23.07%	22,813			
FY 2016-17	131,879	8.35%	10,159			
FY 2017-18	135,413	2.68%	3,534			
FY 2018-19	137,019	1.19%	1,606			

Monthly Average	e Growth Ac	tuals
FY 2010-11 1st Half	0	-
FY 2010-11 2nd Half	0	-
FY 2010-11	0	-
FY 2011-12 1st Half	0	-
FY 2011-12 2nd Half	671	_
FY 2011-12	335	_
FY 2012-13 1st Half	175	4.27%
FY 2012-13 2nd Half	334	6.08%
FY 2012-13	255	5.17%
FY 2013-14 1st Half	232	3.46%
FY 2013-14 2nd Half	12,189	91.80%
FY 2013-14	6,210	47.63%
FY 2014-15 1st Half	2,769	3.15%
FY 2014-15 2nd Half	2,189	2.12%
FY 2014-15	2,479	2.63%
FY 2015-16 1st Half	1,863	1.61%
FY 2015-16 2nd Half	1,039	0.83%
FY 2015-16	1,451	1.22%
·		

Monthly Average Growth Comparisons						
Dagwagt	Monthly	Change	Percent	nt Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	468	727	0.36%	0.56%		
FY 2016-17 2nd Half	357	601	0.27%	0.45%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	98	N/A	0.07%		
FY 2016-17	413	664	0.32%	0.50%		
FY 2017-18 1st Half	282	476	0.21%	0.35%		
FY 2017-18 2nd Half	143	303	0.11%	0.22%		
FY 2017-18	213	390	0.16%	0.28%		
FY 2018-19 1st Half	126	260	0.09%	0.18%		
FY 2018-19 2nd Half	59	174	0.04%	0.12%		
FY 2018-19	93	217	0.07%	0.15%		

#### **Breast and Cervical Cancer Program**

The Breast and Cervical Cancer Treatment Program (BCCP) was authorized under SB 01S2-012 and began enrolling eligible women in July 2002. Women under this optional coverage group were screened using the Centers for Disease Control's national breast and cervical cancer early detection and prevention guidelines, and found to have breast or cervical cancer. These women are between the ages of 40 and 64, uninsured, and otherwise not eligible for Medicaid. The Colorado Department of Public Health and Environment (CDPHE) administers the screening program as a grantee of the Centers of Disease Control. Regulations for the nationwide screening program indicate that the program is for low-income women, which CDPHE has interpreted to be less than 250% of the federal poverty level. To date, all 50 states have approved the option of covering these women under Medicaid.

HB 14-1045 most recently extended State authorization of this program. With the approval of CDPHE's FY 2016-17 R-4 in the FY 2016-17 Long Bill (HB 16-1405), the age range for cervical cancer screenings and treatment was extended to include women ages 21 to 39.

25.5-5-308 (1), C.R.S.

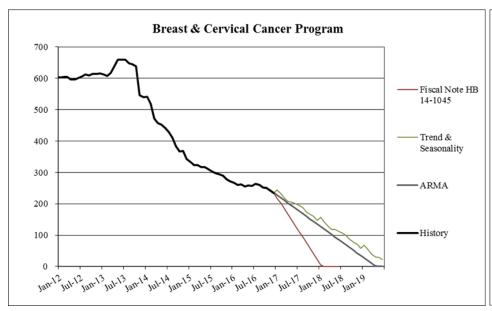
The general assembly hereby finds and declares that breast and cervical cancer are significant health problems for women in this state. The general assembly further finds and declares that these cancers can and should be prevented and treated whenever possible. It is therefore the intent of the general assembly to enact this section to provide for the prevention and treatment of breast and cervical cancer to women where it is not otherwise available for reasons of cost.

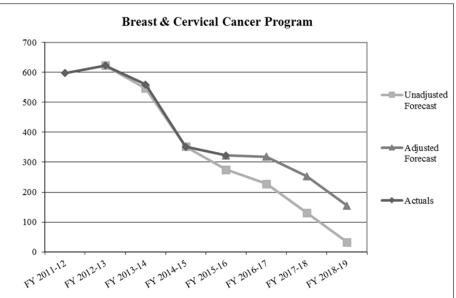
25.5-5-308 (2), C.R.S.

As used in this section, unless the context otherwise requires:

- (a) "Eligible person" means a person who:
- (I)(A) Has been screened for breast or cervical cancer under the centers for disease control and prevention's national breast and cervical cancer early detection program established under Title XV of the federal "Public Health Service Act", 42 U.S.C. sec. 300k et seq., in accordance with the requirements of section 1504 of such act, 42 U.S.C. sec. 300n, on or after July 1, 2002, unless the centers for Medicare and Medicaid services approves the state department's amendment to the medical assistance plan and the state department is able to implement the breast and cervical cancer prevention and treatment program before such date, then the person must be screened on or after the implementation date of such program; or
- (B) Has been screened for breast or cervical cancer by a provider who does not receive funds through the centers for disease control and prevention's national breast and cervical cancer early detection program but whose screening activities are recognized by the department of public health and environment as part of screening activities under the centers for disease control and prevention's national breast and cervical cancer early detection program. This sub-subparagraph (B) shall apply only if the state department receives authority to receive federal financial participation for such persons. The state department shall request authority for federal financial participation when the state department determines that the amount of moneys accumulated in the eligibility expansion account created in paragraph (c) of subsection (8) of this section, including any amounts pledged or promised through a gift, grant, or donation, is sufficient to sustain the projected number of additional persons who would be eligible for the program under this sub-subparagraph (B).
- (II) Has been diagnosed with breast or cervical cancer and is in need of breast or cervical cancer treatment;
- (III) Has not yet attained sixty-five years of age; and
- (IV) Does not have any creditable coverage as defined under federal law pursuant to 42 U.S.C. sec. 300gg (c).

# Breast and Cervical Cancer Program: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Fiscal Note HB 14-1045					
Trend & Seasonality	ВССР	Constant, Trend, Seasonal Dummy Variables	10.87	10.3	0.8112
ARMA	D(BCCP)	Constant, AR(1), MA(1)	7.74	7.56	0.0362

Breast and Cervical Cancer Program: Model Results <sup>1</sup>						
FY 2016-17	FY 2016-17 FY 2014-15 FY 2015-16 Projected Growth Rate Projected FY 2016-17 Caseload Change Average Month Change					
Fiscal Note HB 14-1045	351	275	-22.91%	212	(63)	(1)
Trend & Seasonality	351	275	-14.91%	234	(41)	5
ARMA	351	275	-17.09%	228	(47)	4

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Fiscal Note HB 14-1045	275	212	-83.96%	34	(178)	(11)
Trend & Seasonality	275	234	-35.90%	150	(84)	(7)
ARMA	275	228	-42.54%	131	(97)	(8)

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Fiscal Note HB 14-1045	212	34	-100.00%	0	(34)	0
Trend & Seasonality	234	150	-58.67%	62	(88)	(7)
ARMA	228	131	-74.81%	33	(98)	(7)

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### Breast and Cervical Cancer Program:

FY 2016-17: -1.24% FY 2017-18: -20.44% FY 2018-19: -38.74%

### Breast and Cervical Cancer Program: Justifications

- Average monthly caseload in FY 2015-16 for BCCP was 322. For the first half of FY 2016-17, caseload in this category did not grow or fall. The forecast has been adjusted accordingly.
- The expansion in MAGI Adults has resulted in many new clients that would have formerly been placed in BCCP now being placed in MAGI Adults. The Department expects declines to continue for clients with FPL below 133%.
- There are two adjustments for this population:
  - o The first is the estimated population of clients in this category with higher than 133% FPL.
  - o The second is the estimated population affected by CDPHE's FY 2016-17 R-4 that expanded the age range for cervical cancer screenings and treatment to include ages 21 to 39. This adjustment is currently based on CDPHE's projections, adjusted to account for a half-year impact since the policy began January 2017.
- This program receives ongoing Tobacco Tax funding to subcontract with clinics that provide screenings.
- Beginning January 2005, the reported caseload decreased dramatically because of an issue within the Medicaid Management Information System (MMIS) that was used to report the data. Because of this issue within the MMIS, the Department obtained a caseload report directly from raw data in the Colorado Benefits Management System. This report was used from July 2005 through March 2006. All subsequent monthly caseload data are obtained from the MMIS report that is used to report all other categories of Medicaid caseload. The caseload counts for the six months from January through June 2005 were left as originally reported, which explains the decrease seen in FY 2004-05.

	Actuals	Monthly Change	% Change
Dec-14	396	-	
Jan-15	379	(17)	-4.29%
Feb-15	368	(11)	-2.90%
Mar-15	368	0	0.00%
Apr-15	361	(7)	-1.90%
May-15	358	(3)	-0.83%
Jun-15	352	(6)	-1.68%
Jul-15	344	(8)	-2.27%
Aug-15	342	(2)	-0.58%
Sep-15	342	0	0.00%
Oct-15	336	(6)	-1.75%
Nov-15	324	(12)	-3.57%
Dec-15	318	(6)	-1.85%
Jan-16	314	(4)	-1.26%
Feb-16	310	(4)	-1.27%
Mar-16	311	1	0.32%
Apr-16	308	(3)	-0.96%
May-16	308	0	0.00%
Jun-16	304	(4)	-1.30%
Jul-16	313	9	2.96%
Aug-16	310	(3)	-0.96%
Sep-16	311	1	0.32%
Oct-16	312	1	0.32%
Nov-16	306	(6)	-1.92%
Dec-16	303	(3)	-0.98%

November 2016 Forecast	
Forecasted December 2016 Level	275

Base trend from December 2016 level						
FY 2016-17	306	-4.94%	(16			

Actuals					
	Monthly Change	% Change			
6-month average	0	-0.04%			
12-month average	(1)	-0.39%			
18-month average	(3)	-0.82%			
24-month average	(4)	-1.10%			

	Breast and Cervical Cancer Program: Historical Caseload and Projections						
	Caseload	% Change	Level Change				
FY 2003-04	105	-	-				
FY 2004-05	87	-17.14%	(18)				
FY 2005-06	188	116.09%	101				
FY 2006-07	228	21.28%	40				
FY 2007-08	270	18.42%	42				
FY 2008-09	317	17.41%	47				
FY 2009-10	425	34.07%	108				
FY 2010-11	531	24.94%	106				
FY 2011-12	597	12.43%	66				
FY 2012-13	623	4.36%	26				
FY 2013-14	559	-10.27%	(64)				
FY 2014-15	351	-37.21%	(208)	November 2	2016 Projecti	on Before Ad	justments
FY 2015-16	275	-21.65%	(76)	FY 2015-16	275	-21.65%	(76)
FY 2016-17	228	-17.09%	(47)	FY 2016-17	185	-32.73%	(90)
FY 2017-18	131	-42.54%	(97)	FY 2017-18	78	-57.84%	(107)
FY 2018-19	33	-74.81%	(98)	FY 2018-19	2	-97.44%	(76)

	Clients over	133% FPL
FY 2015-16		47
FY 2016-17		63
FY 2017-18		68
FY 2018-19		68

Cervical Cancer	Cervical Cancer Age Expansion				
FY 2015-16	0				
FY 2016-17	27				
FY 2017-18	54				
FY 2018-19	54				

February 2017 Projections After Adjustments					
FY 2015-16	322	-19.58%	(78)		
FY 2016-17	318	-1.24%	(4)		
FY 2017-18	253	-20.44%	(65)		
FY 2018-19	155	-38.74%	(98)		

40				
42				
47				
108				
106				
66				
26				
(64)				
(208)	November 20	16 Projection	n Before Adjus	tments
(76)	FY 2015-16	275	-21.65%	(7
(47)	FY 2016-17	185	-32.73%	(9
(97)	FY 2017-18	78	-57.84%	(10
(98)	FY 2018-19	2	-97.44%	(7
()				<u> </u>

Clients	Clients over 133% FPL					
FY 2015-16	47					
FY 2016-17	47					
FY 2017-18	47					
FY 2018-19	47					

Cervical Cancer Age Expansion				
FY 2015-16	0			
FY 2016-17	54			
FY 2017-18	54			
FY 2018-19	54			

November 2016 Projection After Adjustments					
FY 2015-16	322	-8.26%	(29)		
FY 2016-17	286	-11.18%	(36)		
FY 2017-18	179	-37.41%	(107		
FY 2018-19	103	-42.46%	(76		

Monthly Average Growth Actuals					
FY 2010-11 1st Half	10	2.05%			
FY 2010-11 2nd Half	11	1.91%			
FY 2010-11	10	1.98%			
FY 2011-12 1st Half	3	0.48%			
FY 2011-12 2nd Half	(1)	-0.14%			
FY 2011-12	1	0.17%			
FY 2012-13 1st Half	3	0.41%			
FY 2012-13 2nd Half	7	1.15%			
FY 2012-13	5	0.78%			
FY 2013-14 1st Half	(20)	-3.12%			
FY 2013-14 2nd Half	(11)	-2.03%			
FY 2013-14	(15)	-2.58%			
FY 2014-15 1st Half	(14)	-3.02%			
FY 2014-15 2nd Half	(7)	-1.93%			
FY 2014-15	(10)	-2.48%			
FY 2015-16 1st Half	(6)	-1.67%			
FY 2015-16 2nd Half	(2)	-0.75%			
FY 2015-16	(4)	-1.21%			

	its Over % FPL
Dec-14	54
Jan-15	46
Feb-15	45
Mar-15	45
Apr-15	44
May-15	41
Jun-15	42
Jul-15	41
Aug-15	45
Sep-15	48
Oct-15	46
Nov-15	46
Dec-15	46
Jan-16	47
Feb-16	50
Mar-16	49
Apr-16	53
May-16	50
Jun-16	47
Jul-16	49
Aug-16	49
Sep-16	59
Oct-16	62
Nov-16	63
Dec-16	68

Monthly Average Growth Comparisons						
Paguast	Monthly C	hange	Percent Change			
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	(5)	(0)	-1.52%	-0.04%		
FY 2016-17 2nd Half	(4)	1	-1.44%	0.41%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	(9)	N/A	-2.74%		
FY 2016-17	(4)	0	-1.48%	0.18%		
FY 2017-18 1st Half	(14)	(8)	-6.44%	-2.92%		
FY 2017-18 2nd Half	(4)	(8)	-2.34%	-3.54%		
FY 2017-18	(9)	(8)	-4.39%	-3.23%		
FY 2018-19 1st Half	(7)	(8)	-5.48%	-4.50%		
FY 2018-19 2nd Half	0	(6)	0.00%	-4.09%		
FY 2018-19	(4)	(7)	-2.74%	-4.30%		

### **MAGI Eligible Children**

One of the primary ways that children qualify for Medicaid is through Section 1931 of the federal Medicaid statute. Under Section 1931, families who were eligible for cash welfare assistance under the Aid to Families with Dependent Children program are still eligible for Medicaid even after the Aid to Families with Dependent Children was replaced by the Temporary Assistance for Needy Families welfare program (referred to as Colorado Works) on July 16, 1996, and clients under the Temporary Assistance for Needy Families program were no longer automatically eligible for Medicaid. Per HB 09-1293 children enrolled in Medicaid will receive continuous eligibility for twelve months.

This category also includes children on Transitional Medicaid. Transitional Medicaid is available to children in families who have received 1931 Medicaid three of the past six months and become ineligible due to an increase in earned income. Children receive Transitional Medicaid benefits for one year. In FY 2015-16, there were an average of 12,451 children on Transitional Medicaid. Although this program has been set to expire many times, it was most recently made permanent.

Children who are born to women enrolled in the Baby and Kid Care program (MAGI Eligible Pregnant Adults) are also included in this category. Between 1986 and 1991, Congress extended Medicaid to new groups of pregnant women and children. Referred to as Baby and Kid Care in Colorado, this program was authorized through the Medicare Catastrophic Coverage Act of 1988. The program enrolls Baby Care women (see the MAGI Eligible Pregnant Adults section of this document for information on these women) and Kid Care children. Kid Care children are born to women with incomes up to 142% of the federal poverty level. The Baby and Kid Care Program serves a much higher income level than the 1931 Families program, and pregnant mothers are not subject to resource or asset limitations to qualify for the program. Moreover, the Baby and Kid Care Program has never had a cash-assistance component and was unaffected by welfare reform in 1996.

In previous years, this caseload was adjusted to include Ribicoff children. Ribicoff children were children aged six to 19, with incomes up to 100% of the federal poverty level with resources limited to \$1,000 who were born after September 30, 1983. Beginning with age six, a new age cohort was phased-in each year. Caseload was adjusted upwards to include these children. However, the final cohort of children was phased-in during FY 2002-03, so no further caseload adjustments are needed. Therefore, the MAGI Eligible Children category includes: children in families who receive Medicaid under Section 1931, children in families who receive Temporary Aid to Needy Families financial assistance coupled with Medicaid, children who are eligible for Kid Care, Ribicoff children, and children who receive Transitional Medicaid.

SB 11-008 expanded Medicaid eligibility to children of all ages with incomes up to 133% FPL (142% FPL after October 2013 due to income disregards for MAGI) in January 2013. Children ages 6 and up with incomes from 108% FPL to 142% FPL with no other insurance are considered SB 11-008 eligible children and receive the enhanced CHP+ federal match, since these children would have otherwise been eligible for CHP+. There are, however, children that do not receive the enhanced CHP+ federal match that are over age 6 with incomes from 108% FPL to 142% FPL; these are the children with other insurance that would not have otherwise qualified for CHP+.

#### 25.5-5-101 (1), C.R.S.

- (a) Individuals who meet the eligibility criteria for the aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;
- (b) Families who meet the eligibility criteria for the aid to families with dependent children program established in rules that were in effect on July 16, 1996, and who subsequently would have become ineligible under such eligibility criteria because of increased earnings or increased hours of employment whose eligibility is specified for a period of time by the federal government;
- (c) Qualified pregnant women, and children under the age of seven, who meet the income resource requirements of the state's aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;
- (d) A newborn child born of a woman who is categorically needy. Such child is deemed Medicaid-eligible on the date of birth and remains eligible for one year so long as the woman remains categorically needy and the child is a member of her household;
- (m) Low-income pregnant women, and children through the age of six, whose income is at or below a certain percentage of the federal poverty level as determined by the federal government;

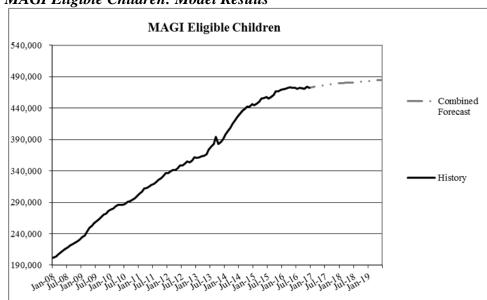
#### 25.5-5-201 (1), C.R.S.

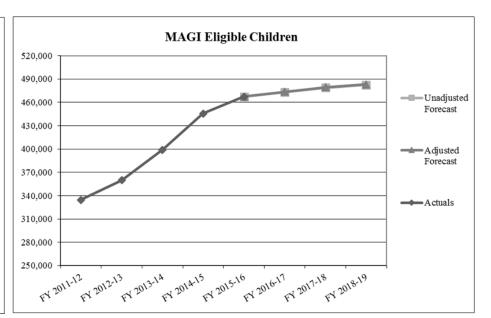
- (a) Individuals who would be eligible for but are not receiving cash assistance;
- (d) Individuals who would be eligible for aid to families with dependent children if child care were paid from earnings;
- (e) Individuals under the age of twenty-one who would be eligible for aid to families with dependent children but do not qualify as dependent children;
- (h) Persons who are eligible for cash assistance under the works program pursuant to section 26-2-706, C.R.S.;

## 25.5-5-205 (3), C.R.S.

- (a) On and after April 1, 1990, children under the age of six years and pregnant women shall be eligible for benefits under the baby and kid care program... (b) The percentage level of the federal poverty line, as defined pursuant to 42 U.S.C. sec. 9902 (2), used to determine eligibility under this subsection (3) shall be one hundred thirty-three percent...;
- (c) (I) On and after September 1, 2011, children born after September 30, 1983, who have attained six years of age but have not attained nineteen years of age shall be eligible for benefits under the baby and kid care program. For the purpose of eligibility under this paragraph (c) only, such individual's family income shall exceed the eligibility threshold used in determining eligibility for aid to families with dependent children assistance pursuant to rules in effect on July 16, 1996, and the method adopted by the state board pursuant to sections 25.5-5-101 (4) (c) and 25.5-5-201 (5) (c), but shall not exceed the equivalent of the percentage level of the federal poverty line that is specified pursuant to subparagraph (II) of this paragraph (c).
- (II) The percentage level of the federal poverty line, as defined pursuant to 42 U.S.C. sec. 9902 (2), used to determine eligibility under this paragraph (c) shall be equivalent to the family income eligibility threshold applied to children under six years of age pursuant to paragraph (b) of this subsection (3).

## MAGI Eligible Children: Model Results





MAGI Eligible Children: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	445,723	467,193	1.33%	473,394	6,201	1,640

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	467,193	473,394	1.25%	479,307	5,913	367

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	473,394	479,307	0.79%	483,080	3,773	351

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### MAGI Eligible Children: Trend Selections

FY 2016-17: 1.33% FY 2017-18: 1.25% FY 2018-19: 0.79%

#### MAGI Eligible Children: Justifications

- Average monthly caseload in FY 2015-16 for MAGI Eligible Children was 468,711. The December 2016 data point was approximately 14,000 below the estimated December caseload in the November 2016 request, with monthly average growth in the first six months of FY 2016-17 of only 1 client. The forecasts have been altered accordingly.
- Beginning with the November 2015 forecast, the Department has selected models separately for the age group 0-1, the age group 2-5, and the age group 6-18, based on the age groups for CHP+ rates. See below for more details.
- The Department identified a data error for July 2015 through December 2015 that incorrectly assigned children to eligibility categories for individuals with disabilities, based on their parents' disability status. This error incorrectly moved clients from Eligible Children and Children's Basic Health Plan (CHP) to Individuals to 59 with Disabilities and Children with Disabilities Buy-In. While the error has been corrected, the Department is currently researching the exact impact to this category.
- One adjustment is included in this forecast, the removal of the 5-year bar on legal immigrant children (HB 09-1353). The Department originally predicted implementation in FY 2014-15, but implementation was delayed until FY 2015-16. This adjustment has been altered to account for the policy already having gone into effect and being partially incorporated into the base trend.
- This population is affected by economic conditions in similar ways as the MAGI Parents/Caretakers, as children on Medicaid have eligibility granted as a function of a parent or guardian in most cases. Caseload trends in this category are highly affected by economic conditions, and tend to be positively correlated with the population of children aged 0 to 18. Growth in the 0 to 18 population dropped from around 2.3% per year from FY 1995-96 to FY 2001-02 to about 0.9% per year from FY 2002-03 to FY 2011-12. The economy is expected to continue improving (see page MC-12)<sup>13</sup>, but the Department does not expect this to be accompanied by a declining Medicaid caseload due to expansionary policy changes.
- Caseload declines occurred from 1993 to 1999 due to economic expansion and effects from the Tatum lawsuit (see MAGI Parents/Caretakers to 68% FPL section for more information on the lawsuit). When the Children's Basic Health Plan program was enacted in 1998, it required that children be screened for Medicaid before determining Children's Basic Health Plan eligibility. As more children applied, many were found to be Medicaid eligible and were enrolled in Medicaid. Between FY 2002-03 and FY 2004-05, caseload in this category grew by 31.4%, which the Department believes is largely due to the state of the economy. The rate of growth fell drastically in FY 2005-06, and the caseload actually contracted by 3.74%. There were large and consistent declines between July 2006 and December 2007, which seems to indicate that the improved economy was having the expected effect on caseload. Similarly, large and consistent increases since January 2008 indicate that weak economic conditions affected caseload in this eligibility type.

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 $<sup>^{13}</sup>$  Source: Office of State Planning and Budgeting, June 2016 Economic and Fiscal Review, page 65

	Actuals	Monthly Change	% Change
Dec-14	446,352	-	-
Jan-15	444,667	(1,685)	-0.38%
Feb-15	446,885	2,218	0.50%
Mar-15	450,777	3,892	0.87%
Apr-15	455,222	4,445	0.99%
May-15	456,425	1,203	0.26%
Jun-15	457,854	1,429	0.31%
Jul-15	454,996	(2,858)	-0.62%
Aug-15	457,343	2,347	0.52%
Sep-15	461,317	3,974	0.87%
Oct-15	466,623	5,306	1.15%
Nov-15	466,734	111	0.02%
Dec-15	469,009	2,275	0.49%
Jan-16	470,109	1,100	0.23%
Feb-16	470,758	649	0.14%
Mar-16	472,221	1,463	0.31%
Apr-16	472,964	743	0.16%
May-16	472,199	(765)	-0.16%
Jun-16	472,050	(149)	-0.03%
Jul-16	470,963	(1,087)	-0.23%
Aug-16	471,980	1,017	0.22%
Sep-16	471,754	(226)	-0.05%
Oct-16	471,116	(638)	-0.14%
Nov-16	473,863	2,747	0.58%
Dec-16	472,054	(1,809)	-0.38%

November 2016 Forecast	
Forecasted December 2016 Level	486,172

Base t	rend from Dec	ember 2016	level
FY 2016-17	472 005	1.03%	4 812

		MAG	I Eligible Cl	nildren: Historical (	Caseload and	Projections	
	Caseload	%	Level				
	Caseloau	Change	Change				
FY 2003-04	195,279	-	-				
FY 2004-05	222,472	13.93%	27,193				
FY 2005-06	214,158	-3.74%	(8,314)				
FY 2006-07	205,390	-4.09%	(8,768)				
FY 2007-08	204,022	-0.67%	(1,368)				
FY 2008-09	235,129	15.25%	31,107				
FY 2009-10	275,672	17.24%	40,543				
FY 2010-11	302,410	9.70%	26,738				
FY 2011-12	334,633	10.66%	32,223				
FY 2012-13	359,843	7.53%	25,210				
FY 2013-14	399,032	10.89%	39,189				
FY 2014-15	445,723	11.70%	46,691	November 2	016 Projecti	on Before A	dj
FY 2015-16	467,193	4.82%	21,470	FY 2015-16	467,193	4.82%	
FY 2016-17	473,193	1.28%	6,000	FY 2016-17	484,543	3.71%	
FY 2017-18	478,756	1.18%	5,563	FY 2017-18	497,221	2.62%	
FY 2018-19	482,449	0.77%	3,693	FY 2018-19	505,313	1.63%	

HB 09-1353 Removing 5 Year Bar on Legal Immigrants				
FY 2015-16	0			
FY 2016-17	201			
FY 2017-18	551			
FY 2018-19	631			

February 2017 Projections After Adjustments						
FY 2015-16	467,193	4.82%	21,470			
FY 2016-17	473,394	1.33%	6,201			
FY 2017-18	479,307	1.25%	5,913			
FY 2018-19	483,080	0.79%	3,773			

Actuals					
Monthly % Change Change					
6-month average	1	0.00%			
12-month average	254	0.05%			
18-month average	789	0.17%			
24-month average	1,071	0.23%			

November 2016 Projection Before Adjustments							
FY 2015-16	467,193	4.82%	21,470				
FY 2016-17	484,543	3.71%	17,350				
FY 2017-18	497,221	2.62%	12,678				
FY 2018-19	505,313	1.63%	8,092				

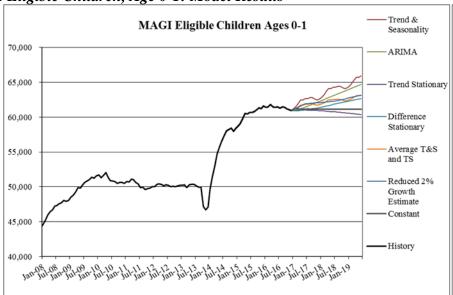
HB 09-1353 Removing 5 Year Bar on Legal Immigrants				
FY 2015-16	0			
FY 2016-17	2,320			
FY 2017-18	2,471			
FY 2018-19	2,551			

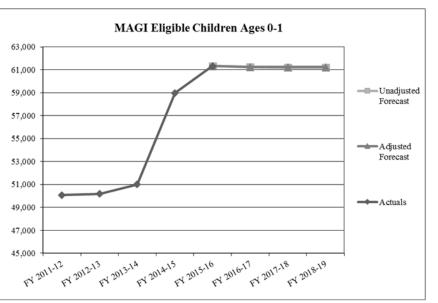
November 2016 Projection After Adjustments							
FY 2015-16	467,193	4.82%	21,470				
FY 2016-17	486,863	4.21%	19,670				
FY 2017-18	499,692	2.64%	12,829				
FY 2018-19	507,864	1.64%	8,172				

Monthly Average	e Growth Ac	tuals
FY 2010-11 1st Half	2,287	0.79%
FY 2010-11 2nd Half	3,009	0.98%
FY 2010-11	2,648	0.88%
FY 2011-12 1st Half	3,084	0.95%
FY 2011-12 2nd Half	2,033	0.60%
FY 2011-12	2,559	0.77%
FY 2012-13 1st Half	2,199	0.62%
FY 2012-13 2nd Half	2,026	0.55%
FY 2012-13	2,113	0.59%
FY 2013-14 1st Half	2,716	0.73%
FY 2013-14 2nd Half	6,009	1.49%
FY 2013-14	4,362	1.11%
FY 2014-15 1st Half	3,400	0.80%
FY 2014-15 2nd Half	1,917	0.44%
FY 2014-15	2,659	0.62%
FY 2015-16 1st Half	1,859	0.41%
FY 2015-16 2nd Half	507	0.11%
FY 2015-16	1,183	0.26%

Monthly Average Growth Comparisons						
Dogwood	Monthly	Change	Percent	Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	2,354	1	0.49%	0.00%		
FY 2016-17 2nd Half	1,736	715	0.35%	0.15%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	4,089	N/A	0.86%		
FY 2016-17	2,045	358	0.42%	0.08%		
FY 2017-18 1st Half	509	506	0.10%	0.11%		
FY 2017-18 2nd Half	338	229	0.07%	0.05%		
FY 2017-18	423	367	0.08%	0.08%		
FY 2018-19 1st Half	953	360	0.19%	0.07%		
FY 2018-19 2nd Half	949	342	0.19%	0.07%		
FY 2018-19	951	351	0.19%	0.07%		

MAGI Eligible Children, Age 0-1: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Children 0-1	Constant, trend, seasonal dummy variables	19.16	18.84	0.6966
ARIMA	d(MAGI Children 0-1)	Constant, AR(1), MA(1)	15.31	15.21	0.2414
Trend Stationary	log(MAGI Children 0-1)	Constant, January 2014 dummy, trend, 2 lags on the dependent variable	-6.72	-6.84	0.9932
Difference Stationary	dlog(MAGI Children 0-1)	Constant, January 2014 dummy, 1 lag on the dependent variable	-7.48	-7.67	0.2924
Average T&S and TS			NA	NA	NA
Constant Growth			NA	NA	NA
Reduced 2% Growth Estimate			NA	NA	NA

MAGI Eligible Children Ages 0-1: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	58,968	61,323	0.57%	61,673	350	95
ARIMA	58,968	61,323	-0.17%	61,219	(104)	(4)
Trend Stationary	58,968	61,323	-0.33%	61,121	(202)	(42)
Difference Stationary	58,968	61,323	-0.36%	61,102	(221)	(40)
Average T&S and TS	58,968	61,323	0.12%	61,397	74	27
<b>Constant Growth</b>	58,968	61,323	-0.17%	61,219	(104)	(30)
Reduced 2% Growth Estimate	58,968	61,323	0.10%	61,384	61	33

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	61,323	61,673	2.47%	63,196	1,523	136
ARIMA	61,323	61,219	1.83%	62,339	1,120	135
Trend Stationary	61,323	61,121	-0.35%	60,907	(214)	(20)
Difference Stationary	61,323	61,102	0.57%	61,450	348	65
Average T&S and TS	61,323	61,397	1.07%	62,054	657	58
Constant Growth	61,323	61,219	-0.07%	61,176	(43)	1
Reduced 2% Growth Estimate	61,323	61,384	1.18%	62,108	724	29

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	61,673	63,196	2.57%	64,820	1,624	136
ARIMA	61,219	62,339	2.63%	63,979	1,640	137
Trend Stationary	61,121	60,907	-0.56%	60,566	(341)	(32)
Difference Stationary	61,102	61,450	1.35%	62,280	830	71
Average T&S and TS	61,397	62,054	1.03%	62,693	639	52
<b>Constant Growth</b>	61,219	61,176	0.00%	61,176	0	0
Reduced 2% Growth Estimate	61,384	62,108	1.03%	62,748	640	73

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# MAGI Eligible Children, Age 0-1: Trend Selections

FY 2016-17: -0.13% FY 2017-18: -0.02% FY 2018-19: 0.02%

### MAGI Eligible Children, Age 0-1: Justifications

Beginning with the November 2015 forecast, the Department has begun estimating this eligibility category with three age group sub-categories, to increase forecast accuracy. Average monthly caseload for FY 2015-16 was 69, and average monthly caseload for the first half of FY 2016-17 was a decrease of 92, lower than what was expected in the November 2016 forecast. The forecast has been adjusted downward in FY 2016-17 and held relatively constant in the request and out years.

	Actuals	Monthly Change	% Change
Dec-14	58,363	-	
Jan-15	58,692	329	0.56%
Feb-15	59,089	397	0.68%
Mar-15	59,776	687	1.16%
Apr-15	60,540	764	1.28%
May-15	60,437	(103)	-0.17%
Jun-15	60,697	260	0.43%
Jul-15	60,679	(18)	-0.03%
Aug-15	60,834	155	0.26%
Sep-15	61,051	217	0.36%
Oct-15	61,373	322	0.53%
Nov-15	61,184	(189)	-0.31%
Dec-15	61,612	428	0.70%
Jan-16	61,413	(199)	-0.32%
Feb-16	61,510	97	0.16%
Mar-16	61,824	314	0.51%
Apr-16	61,472	(352)	-0.57%
May-16	61,407	(65)	-0.11%
Jun-16	61,519	112	0.18%
Jul-16	61,307	(212)	-0.34%
Aug-16	61,482	175	0.29%
Sep-16	61,447	(35)	-0.06%
Oct-16	61,186	(261)	-0.42%
Nov-16	61,087	(99)	-0.16%
Dec-16	60,969	(118)	-0.19%

November 2016 Forecast		
Forecasted December 2016 Level	62,768	

Base trend from December 2016 level					
FY 2016-	17	61,108	-0.35%	(215)	

MAGI Eligible Children Ages 0-1: Historical Caseload and Projecti						
	Caseload	% Change	Level Change			
FY 2007-08	45,505	-	-			
FY 2008-09	48,599	6.80%	3,094			
FY 2009-10	51,325	5.61%	2,726			
FY 2010-11	50,713	-1.19%	(612)			
FY 2011-12	50,069	-1.27%	(644)			
FY 2012-13	50,186	0.23%	117			
FY 2013-14	51,005	1.63%	819			
FY 2014-15	58,968	15.61%	7,963	November 20	016 Projecti	on Before A
FY 2015-16	61,323	3.99%	2,355	FY 2015-16	61,323	3.99%
FY 2016-17	61,219	-0.17%	(104)	FY 2016-17	62,549	2.00%
FY 2017-18	61,176	-0.07%	(43)	FY 2017-18	63,612	1.70%
FY 2018-19	61,176	0.00%	0	FY 2018-19	64,248	1.00%

HB 09-1353 Removing 5 Year Bar on Legal Immigrants		
FY 2015-16	0	
FY 2016-17	25	
FY 2017-18	56	
FY 2018-19	66	

February 2017 Projections After Adjustments					
FY 2015-16	61,323	3.99%	2,355		
FY 2016-17	61,244	-0.13%	(79)		
FY 2017-18	61,232	-0.02%	(12)		
FY 2018-19	61,242	0.02%	10		

Actuals			
	Monthly	%	
6-month average	Change (92)	-0.15%	
12-month average	(54)	-0.09%	
18-month average	15	0.03%	
24-month average	109	0.18%	

November 2016 Projection Before Adjustments					
FY 2015-16	61,323	3.99%	2,355		
FY 2016-17	62,549	2.00%	1,226		
FY 2017-18	63,612	1.70%	1,063		
FY 2018-19	64,248	1.00%	636		

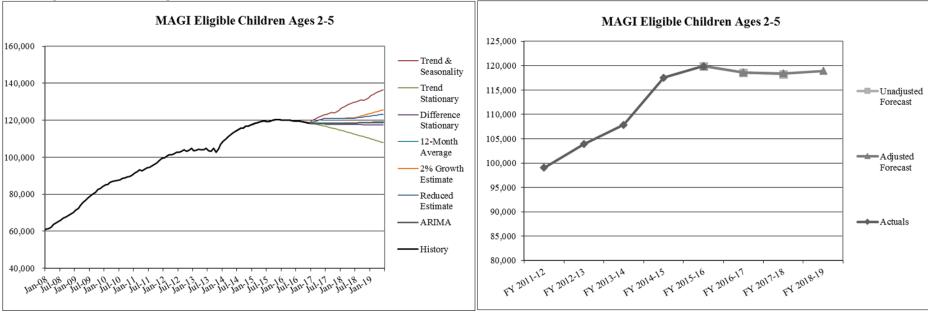
HB 09-1353 Removing 5 Year Bar on Legal Immigrants			
FY 2015-16	0		
FY 2016-17	298		
FY 2017-18	304		
FY 2018-19	314		

November 2	November 2016 Projection After Adjustments					
FY 2015-16	61,323	3.99%	2,355			
FY 2016-17	62,847	2.49%	1,524			
FY 2017-18	63,916	1.70%	1,069			
FY 2018-19	64,562	1.01%	646			

59) (8) (3) (6)	-0.14% -0.03% -0.08% -0.11%
18) 13) 57)	-0.03% -0.08% -0.11%
13) 57)	-0.08% -0.11%
57)	-0.11%
36	0.050/
	0.07%
1)	-0.02%
(6)	-0.01%
8	0.04%
6	0.01%
14)	-1.09%
38	3.13%
22	1.02%
92	0.51%
39	0.66%
10	0.58%
53	0.25%
(6)	-0.02%
59	0.11%
	(6) 18

Monthly Average Growth Comparisons						
Dogwood	Monthly	Change	Percent Change			
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	208	(92)	0.34%	-0.15%		
FY 2016-17 2nd Half	158	40	0.25%	0.07%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	458	N/A	0.75%		
FY 2016-17	183	(26)	0.29%	-0.04%		
FY 2017-18 1st Half	31	3	0.05%	0.01%		
FY 2017-18 2nd Half	29	(0)	0.05%	0.00%		
FY 2017-18	30	2	0.05%	0.00%		
FY 2018-19 1st Half	75	2	0.12%	0.00%		
FY 2018-19 2nd Half	73	(0)	0.11%	0.00%		
FY 2018-19	74	1	0.12%	0.00%		

# MAGI Eligible Children, Age 2-5: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Children 2-5	Constant, trend, seasonal dummy variables	19.89	19.58	0.952
ARIMA	d(MAGI Children 2- 5)	Constant, AR(1) - AR(5), MA(1) - MA(5)	14.23	14.04	0.2788
Trend Stationary	log(MAGI Children 2- 5)	Constant, trend, 4 lags on the dependent variable	-9.76	-10.05	0.9355
Difference Stationary	dlog(MAGI Children 2-5)	Constant, 3 lags on the dependent variable	-9.49	-9.59	0.3877
12-Month Average			NA	NA	NA
2% Growth Estimate			NA	NA	NA
Reduced Estimate			NA	NA	NA

	MAGI Eligible Children Ages 2-5: Model Results <sup>1</sup>					
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	117,520	119,917	0.30%	120,277	360	283
ARIMA	117,520	119,917	-1.11%	118,586	(1,331)	(128)
Trend Stationary	117,520	119,917	-1.33%	118,322	(1,595)	(229)
Difference Stationary	117,520	119,917	-1.14%	118,550	(1,367)	(140)
12-Month Average	117,520	119,917	-0.97%	118,754	(1,163)	(96)
2% Growth Estimate	117,520	119,917	2.00%	122,315	2,398	115
Reduced Estimate	117,520	119,917	-0.36%	119,485	(432)	115

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	119,917	120,277	4.92%	126,195	5,918	566
ARIMA	119,917	118,586	-0.27%	118,266	(320)	37
Trend Stationary	119,917	118,322	-3.10%	114,654	(3,668)	(347)
Difference Stationary	119,917	118,550	-0.66%	117,768	(782)	(19)
12-Month Average	119,917	118,754	-0.27%	118,433	(321)	0
2% Growth Estimate	119,917	122,315	2.00%	124,761	2,446	20
Reduced Estimate	119,917	119,485	1.28%	121,014	1,529	10

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	120,277	126,195	5.38%	132,984	6,789	566
ARIMA	118,586	118,266	0.44%	118,786	520	44
Trend Stationary	118,322	114,654	-3.94%	110,137	(4,517)	(393)
Difference Stationary	118,550	117,768	-0.18%	117,556	(212)	(17)
12-Month Average	118,754	118,433	0.00%	118,433	0	0
2% Growth Estimate	122,315	124,761	2.00%	127,256	2,495	367
Reduced Estimate	119,485	121,014	1.03%	122,260	1,246	183

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# MAGI Eligible Children, Age 2-5: Trend Selections

FY 2016-17: -1.06% FY 2017-18: -0.19% FY 2018-19: 0.46%

### MAGI Eligible Children, Age 2-5: Justifications

Beginning with the November 2015 forecast, the Department has begun estimating this eligibility category with three age group sub-categories, to increase forecast accuracy. Average monthly caseload growth for the first half of FY 2016-17 was a reduction of 191 clients, much lower than previously anticipated in the November 2016 forecast. Due to consistent reductions over the past 8 months, the Department has adjusted this forecast downward.

	Actuals	Monthly Change	% Change
Dec-14	117,381	-	-
Jan-15	117,753	372	0.32%
Feb-15	118,299	546	0.46%
Mar-15	118,818	519	0.44%
Apr-15	119,235	417	0.35%
May-15	119,418	183	0.15%
Jun-15	119,587	169	0.14%
Jul-15	119,201	(386)	-0.32%
Aug-15	119,513	312	0.26%
Sep-15	119,930	417	0.35%
Oct-15	120,311	381	0.32%
Nov-15	120,276	(35)	-0.03%
Dec-15	120,263	(13)	-0.01%
Jan-16	120,118	(145)	-0.12%
Feb-16	119,991	(127)	-0.11%
Mar-16	120,004	13	0.01%
Apr-16	120,094	90	0.07%
May-16	119,723	(371)	-0.31%
Jun-16	119,581	(142)	-0.12%
Jul-16	119,466	(115)	-0.10%
Aug-16	119,477	11	0.01%
Sep-16	119,308	(169)	-0.14%
Oct-16	119,012	(296)	-0.25%
Nov-16	118,734	(278)	-0.23%
Dec-16	118,433	(301)	-0.25%

November 2016 Forecast		
Forecasted December 2016 Level	122,726	

Base trend from December 2016 level					
FY 2016-17	118,752	-0.97%	(1,165)		

		MAGI Elig	gible Childr	en Ages 2-5: Histor	ical Caseloa	d and Projec	tions
	Caseload	% Change	Level Change				
FY 2007-08	62,156	-	-				
FY 2008-09	71,452	14.96%	9,296				
FY 2009-10	84,091	17.69%	12,639				
FY 2010-11	91,035	8.26%	6,944				
FY 2011-12	99,043	8.80%	8,008				
FY 2012-13	103,886	4.89%	4,843				
FY 2013-14	107,876	3.84%	3,990				
FY 2014-15	117,520	8.94%	9,644	November 2	016 Projecti	on Before A	djusti
FY 2015-16	119,917	2.04%	2,397	FY 2015-16	119,917	2.04%	
FY 2016-17	118,586	-1.11%	(1,331)	FY 2016-17	122,315	2.00%	
FY 2017-18	118,266	-0.27%	(320)	FY 2017-18	124,700	1.95%	
FY 2018-19	118,786	0.44%	520	FY 2018-19	125,947	1.00%	

HB 09-1353 Removing 5 Year Bar on Legal Immigrants			
FY 2015-16			
FY 2016-17	56		
FY 2017-18	147		
FY 2018-19	168		

February 2017 Projections After Adjustments					
FY 2015-16	119,917	2.04%	2,397		
FY 2016-17	118,642	-1.06%	(1,275)		
FY 2017-18	118,413	-0.19%	(229)		
FY 2018-19	118,954	0.46%	541		

Actuals				
	Monthly Change	% Change		
6-month average	(191)	-0.16%		
12-month average	(153)	-0.13%		
18-month average	(64)	-0.05%		
24-month average	44	0.04%		

November 2016 Projection Before Adjustments					
FY 2015-16	119,917	2.04%	2,397		
FY 2016-17	122,315	2.00%	2,398		
FY 2017-18	124,700	1.95%	2,385		
FY 2018-19	125,947	1.00%	1,247		

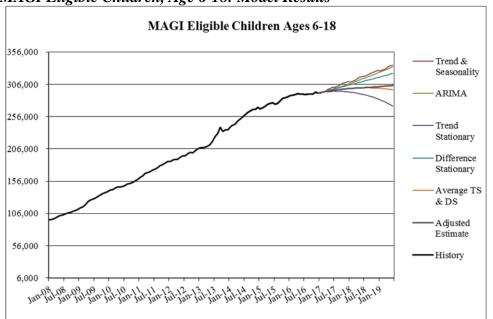
HB 09-1353 Removing 5 Year Bar on Legal Immigrants			
FY 2015-16	0		
FY 2016-17	621		
FY 2017-18	657		
FY 2018-19	678		

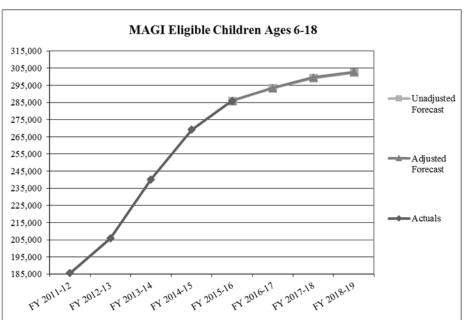
November 2	November 2016 Projection After Adjustments						
FY 2015-16	119,917	2.04%	2,397				
FY 2016-17	122,936	2.52%	3,019				
FY 2017-18	125,357	1.97%	2,421				
FY 2018-19	126,625	1.01%	1,268				

Monthly Average	e Growth Ac	tuals
FY 2010-11 1st Half	501	0.56%
FY 2010-11 2nd Half	616	0.67%
FY 2010-11	558	0.62%
FY 2011-12 1st Half	890	0.92%
FY 2011-12 2nd Half	521	0.52%
FY 2011-12	705	0.72%
FY 2012-13 1st Half	373	0.36%
FY 2012-13 2nd Half	12	0.01%
FY 2012-13	192	0.19%
FY 2013-14 1st Half	354	0.35%
FY 2013-14 2nd Half	1,158	1.05%
FY 2013-14	756	0.70%
FY 2014-15 1st Half	556	0.48%
FY 2014-15 2nd Half	368	0.31%
FY 2014-15	462	0.40%
FY 2015-16 1st Half	113	0.09%
FY 2015-16 2nd Half	(114)	-0.09%
FY 2015-16	(1)	0.00%

Monthly	Monthly Average Growth Comparisons							
Daguast	Monthly	Change	Percent	Change				
Request	R-1	S-1	R-1	S-1				
FY 2016-17 1st Half	524	(191)	0.43%	-0.16%				
FY 2016-17 2nd Half	421	(46)	0.34%	-0.04%				
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	1,136	N/A	0.96%				
FY 2016-17	472	(119)	0.39%	-0.10%				
FY 2017-18 1st Half	18	38	0.01%	0.03%				
FY 2017-18 2nd Half	9	43	0.01%	0.04%				
FY 2017-18	13	40	0.01%	0.03%				
FY 2018-19 1st Half	188	49	0.15%	0.04%				
FY 2018-19 2nd Half	182	43	0.14%	0.04%				
FY 2018-19	185	46	0.15%	0.04%				

## MAGI Eligible Children, Age 6-18: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Children 6-18	Constant, trend, seasonal dummy variables	20.84	20.27	0.8906
ARIMA	d(MAGI Children 6-18)	Constant, AR(1), AR(2), MA(1)	18.13	17.95	0.02
Trend Stationary	log(MAGI Children 6-18)	Constant, trend, 1 lag on the dependent variable	-6.50	-6.58	0.9994
Difference Stationary	dlog(MAGI Children 6-18)	Constant, 2 lags on the dependent variable	-7.08	-7.18	-0.0452
Average TS & DS			NA	NA	NA
Adjusted Estimate			NA	NA	NA

	MAGI Eligible Children Ages 6-18: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2	
Trend & Seasonality	269,234	285,953	2.89%	294,217	8,264	852	
ARIMA	269,234	285,953	2.73%	293,760	7,807	629	
Trend Stationary	269,234	285,953	2.44%	292,930	6,977	338	
Difference Stationary	269,234	285,953	2.76%	293,845	7,892	629	
Average TS & DS	269,234	285,953	2.60%	293,388	7,435	483	
Adjusted Estimate	269,234	285,953	2.60%	293,388	7,435	483	

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	285,953	294,217	5.40%	310,105	15,888	1,448
ARIMA	285,953	293,760	4.49%	306,950	13,190	1,349
Trend Stationary	285,953	292,930	0.26%	293,692	762	(366)
Difference Stationary	285,953	293,845	3.77%	304,923	11,078	997
Average TS & DS	285,953	293,388	2.02%	299,314	5,926	315
Adjusted Estimate	285,953	293,388	2.02%	299,314	5,926	315

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	294,217	310,105	5.60%	327,471	17,366	1,448
ARIMA	293,760	306,950	5.76%	324,630	17,680	1,546
Trend Stationary	292,930	293,692	-3.98%	282,003	(11,689)	(1,505)
Difference Stationary	293,845	304,923	4.01%	317,150	12,227	1,037
Average TS & DS	293,388	299,314	0.09%	299,583	269	(234)
Adjusted Estimate	293,388	299,314	1.06%	302,487	3,173	300

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# MAGI Eligible Children, Age 6-18: Trend Selections

FY 2016-17: 2.64% FY 2017-18: 2.10% FY 2018-19: 1.08%

## MAGI Eligible Children, Age 6-18: Justifications

Beginning with the November 2015 forecast, the Department has begun estimating this eligibility category with three age group sub-categories, to increase forecast accuracy. The Department has brought this forecast down from the November 2016 forecast, to account for caseload reductions and slower growth over the first half of FY 2016-17. The December 2016 data point was approximately 8,000 lower than the predicated caseload for December, in the previous forecast.

	Actuals	Monthly Change	% Change
Dec-14	270,608	-	-
Jan-15	268,222	(2,386)	-0.88%
Feb-15	269,497	1,275	0.48%
Mar-15	272,183	2,686	1.00%
Apr-15	275,447	3,264	1.20%
May-15	276,570	1,123	0.41%
Jun-15	277,570	1,000	0.36%
Jul-15	275,116	(2,454)	-0.88%
Aug-15	276,996	1,880	0.68%
Sep-15	280,336	3,340	1.21%
Oct-15	284,939	4,603	1.64%
Nov-15	285,274	335	0.12%
Dec-15	287,134	1,860	0.65%
Jan-16	288,578	1,444	0.50%
Feb-16	289,257	679	0.24%
Mar-16	290,393	1,136	0.39%
Apr-16	291,398	1,005	0.35%
May-16	291,069	(329)	-0.11%
Jun-16	290,950	(119)	-0.04%
Jul-16	290,190	(760)	-0.26%
Aug-16	291,021	831	0.29%
Sep-16	290,999	(22)	-0.01%
Oct-16	290,918	(81)	-0.03%
Nov-16	294,042	3,124	1.07%
Dec-16	292,652	(1,390)	-0.47%

November 2016 Forecast	
Forecasted December 2016 Level	300,678

Base t	rend from Dec	ember 2016	level
FY 2016-17	292.145	2.17%	6 192

		MAGI Elig	ible Childre	en Ages 6-18:	Histo	rical Caseloa	nd and Proje	ctions
	Caseload	% Change	Level Change					
FY 2007-08	98,529	-	-					
FY 2008-09	115,078	16.80%	16,549					
FY 2009-10	140,256	21.88%	25,178					
FY 2010-11	160,662	14.55%	20,406					
FY 2011-12	185,521	15.47%	24,859					
FY 2012-13	205,770	10.91%	20,249					
FY 2013-14	240,151	16.71%	34,381					
FY 2014-15	269,234	12.11%	29,083	Novem	ber 2	016 Projecti	on Before A	djustı
FY 2015-16	285,953	6.21%	16,719	FY 201	5-16	285,953	6.21%	1
FY 2016-17	293,388	2.60%	7,435	FY 201	6-17	299,679	4.80%	1
FY 2017-18	299,314	2.02%	5,926	FY 201	7-18	308,909	3.08%	
FY 2018-19	302,487	1.06%	3,173	FY 201	8-19	315,118	2.01%	

HB 09-1353 Removing 5 Year Bar on Legal Immigrants				
FY 2015-16	0			
FY 2016-17	120			
FY 2017-18	348			
FY 2018-19	397			

February 2017 Projections After Adjustments							
FY 2015-16	285,953	6.21%	16,719				
FY 2016-17	293,508	2.64%	7,555				
FY 2017-18	299,662	2.10%	6,154				
FY 2018-19	302,884	1.08%	3,222				

Actuals					
	Monthly Change	% Change			
6-month average	284	0.10%			
12-month average	460	0.16%			
18-month average	838	0.30%			
24-month average	919	0.33%			

November 2016 Projection Before Adjustments							
FY 2015-16	285,953	6.21%	16,719				
FY 2016-17	299,679	4.80%	13,726				
FY 2017-18	308,909	3.08%	9,230				
FY 2018-19	315,118	2.01%	6,209				

HB 09-1353 Removing 5 Year Bar on Legal Immigrants				
FY 2015-16	0			
FY 2016-17	1,401			
FY 2017-18	1,510			
FY 2018-19	1,559			

November 2016 Projection After Adjustments						
FY 2015-16	285,953	6.21%	16,719			
FY 2016-17	301,080	5.29%	15,127			
FY 2017-18	310,419	3.10%	9,339			
FY 2018-19	316,677	2.02%	6,258			

Monthly Averag	e Growth Ac	tuals
FY 2010-11 1st Half	1,855	1.22%
FY 2010-11 2nd Half	2,411	1.47%
FY 2010-11	2,133	1.35%
FY 2011-12 1st Half	2,251	1.26%
FY 2011-12 2nd Half	1,477	0.78%
FY 2011-12	1,864	1.02%
FY 2012-13 1st Half	1,832	0.92%
FY 2012-13 2nd Half	1,996	0.95%
FY 2012-13	1,914	0.93%
FY 2013-14 1st Half	2,907	1.32%
FY 2013-14 2nd Half	3,263	1.34%
FY 2013-14	3,085	1.33%
FY 2014-15 1st Half	2,553	0.98%
FY 2014-15 2nd Half	1,160	0.43%
FY 2014-15	1,856	0.70%
FY 2015-16 1st Half	1,594	0.57%
FY 2015-16 2nd Half	636	0.22%
FY 2015-16	1,115	0.39%
	_	-

Monthly Average Growth Comparisons						
D	Monthly	Change	Percent Change			
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	1,621	284	0.55%	0.10%		
FY 2016-17 2nd Half	1,157	721	0.38%	0.24%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	2,494	N/A	0.85%		
FY 2016-17	1,389	503	0.47%	0.17%		
FY 2017-18 1st Half	460	465	0.15%	0.16%		
FY 2017-18 2nd Half	300	186	0.10%	0.06%		
FY 2017-18	380	325	0.12%	0.11%		
FY 2018-19 1st Half	689	309	0.22%	0.10%		
FY 2018-19 2nd Half	694	299	0.22%	0.10%		
FY 2018-19	692	304	0.22%	0.10%		

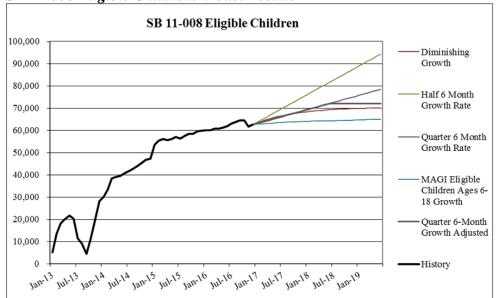
#### SB 11-008 Eligible Children

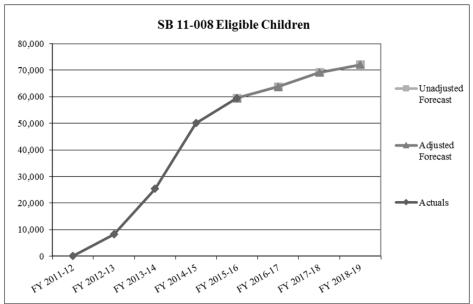
Prior to the implementation of SB 11-008 in January 2013, children age 0 to 5 whose family income was under 133% FPL were eligible for Medicaid, and children ages 6 to 18 whose family income was under 100% FPL were eligible for Medicaid. SB 11-008 increased the FPL threshold for children ages 6 to 18 up to 133% FPL, 142% FPL with income disregards applied after October 2013. Services for clients that would have been eligible for CHP+ before the implementation of SB 11-008 receive the enhanced CHP+ federal match. These clients are identified as Medicaid eligible children that are over the age of 6, with incomes above 108% FPL, and no other insurance.

25.5-5-101 (1), C.R.S.

(m) Children under the age of nineteen who meet the eligibility criteria pursuant to section 1902 (a) (10) (A) of the federal "Social Security Act".

# SB 11-008 Eligible Children: Model Results





SB 11-008 Eligible Children: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Diminishing Growth	50,113	59,501	7.69%	64,077	4,576	861
Half 6 Month Growth Rate	50,113	59,501	8.84%	64,761	5,260	1,083
Quarter 6 Month Growth Rate	50,113	59,501	7.28%	63,833	4,332	818
Quarter 6-Month Growth Adjusted	50,113	59,501	7.28%	63,833	4,332	818
MAGI Eligible Children Ages 6-18 Growth	50,113	59,501	6.18%	63,178	3,677	627

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Diminishing Growth	59,501	64,077	6.34%	68,139	4,062	250
Half 6 Month Growth Rate	59,501	64,761	16.97%	75,751	10,990	1,058
Quarter 6 Month Growth Rate	59,501	63,833	8.31%	69,138	5,305	529
Quarter 6-Month Growth Adjusted	59,501	63,833	8.31%	69,138	5,305	529
MAGI Eligible Children Ages 6-18 Growth	59,501	63,178	1.22%	63,949	771	67

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Diminishing Growth	64,077	68,139	2.37%	69,754	1,615	71
Half 6 Month Growth Rate	64,761	75,751	16.76%	88,447	12,696	1,058
Quarter 6 Month Growth Rate	63,833	69,138	9.18%	75,485	6,347	529
Quarter 6-Month Growth Adjusted	63,833	69,138	4.21%	72,049	2,911	0
MAGI Eligible Children Ages 6-18 Growth	63,178	63,949	1.06%	64,627	678	64

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## SB 11-008 Eligible Children: Trend Selections

FY 2016-17: 7.32% FY 2017-18: 8.36% FY 2018-19: 4.22%

#### SB 11-008 Eligible Children: Justifications

- Average monthly caseload in FY 2015-16 for SB 11-008 Eligible Children was 59,682. The December 2016 data point was nearly 3,000 lower than the November 2016 forecast, and average monthly growth in the first half of FY 2016-17 was only 119. The Department brought this forecast down based on the most recent actuals.
- One adjustment is included in this forecast, for the removal of the 5-year bar on legal immigrant children (HB 09-1353). The Department originally predicted implementation in FY 2014-15, but implementation was delayed until FY 2015-16. This adjustment has been lowered to account for the impact being partially incorporated in the trend.
- Data issues from July 2013 through November 2013 prevented the Department from identifying these clients and significant drops in caseload can be seen for these months. These data issues left inaccurate data points for previous forecasts. The Department believes that these issues have been resolved and all appropriate clients can now be identified.
- The Department believes that this eligibility is affected by continuous eligibility and is researching the extent of the effects of continuous eligibility on this category.
- These clients are identified as Medicaid eligible children over age 6, incomes above 108% FPL, with no other insurance.

	Actuals	Monthly Change	% Change
Dec-14	47,275	-	
Jan-15	53,548	6,273	13.27%
Feb-15	55,445	1,897	3.54%
Mar-15	56,155	710	1.28%
Apr-15	55,565	(590)	-1.05%
May-15	56,104	539	0.97%
Jun-15	57,059	955	1.70%
Jul-15	56,220	(839)	-1.47%
Aug-15	57,355	1,135	2.02%
Sep-15	58,330	975	1.70%
Oct-15	58,336	6	0.01%
Nov-15	59,640	1,304	2.24%
Dec-15	59,867	227	0.38%
Jan-16	59,934	67	0.11%
Feb-16	59,950	16	0.03%
Mar-16	60,614	664	1.11%
Apr-16	60,790	176	0.29%
May-16	61,169	379	0.62%
Jun-16	61,809	640	1.05%
Jul-16	62,983	1,174	1.90%
Aug-16	63,716	733	1.16%
Sep-16	64,432	716	1.12%
Oct-16	64,454	22	0.03%
Nov-16	61,650	(2,804)	-4.35%
Dec-16	62,524	874	1.42%

November 2016 For	ecast
Forecasted December 2016 Lev	el 65,266

Base trend from December 2016 level				
FY 2016-17	62,909	5.73%	3,408	

	Digible Children: Historical Caseload and Projections			
	Caseload	%	Level	
	Caseroau	Change	Change	
FY 2012-13	8,236	-	-	
FY 2013-14	25,345	2	17,109	
FY 2014-15	50,113	97.72%	24,768	November 2016 Projection Before Adjustme
FY 2015-16	59,501	18.73%	9,388	FY 2015-16 59,501 18.73% 9
FY 2016-17	63,833	7.28%	4,332	FY 2016-17 65,249 9.66% 5
FY 2017-18	69,138	8.31%	5,305	FY 2017-18 71,598 9.73% 6
FY 2018-19	72,049	4.21%	2,911	FY 2018-19 74,505 4.06% 2

HB 09-1353 Removing 5 Year Bar on Legal Immigrants				
FY 2015-16	-			
FY 2016-17	25			
FY 2017-18	61			
FY 2018-19	67			

February 20	February 2017 Projections After Adjustments						
FY 2015-16	59,501	18.73%	9,388				
FY 2016-17	63,858	7.32%	4,357				
FY 2017-18	69,199	8.36%	5,341				
FY 2018-19	72,116	4.22%	2,917				

Actuals				
	Monthly % Change Chan			
6-month average	119	0.21%		
12-month average	221	0.37%		
18-month average	304	0.52%		
24-month average	635	1.21%		

November 2016 Projection Before Adjustments					
FY 2015-16	59,501	18.73%	9,388		
FY 2016-17	65,249	9.66%	5,748		
FY 2017-18	71,598	9.73%	6,349		
FY 2018-19	74,505	4.06%	2,907		

HB 09-1353 Removing 5 Year Bar on Legal Immigrants			
FY 2015-16	-		
FY 2016-17	280		
FY 2017-18	292		
FY 2018-19	298		

November	November 2016 Projection After Adjustments						
FY 2015-16	FY 2015-16 59,501 18.73% 9,38						
FY 2016-17	65,529	10.13%	6,028				
FY 2017-18	71,890	9.71%	6,361				
FY 2018-19	74,803	4.05%	2,913				

Monthly Average Growth Comparisons						
Dogwood	Monthly	Change	Percent Change			
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	576	120	0.91%	0.22%		
FY 2016-17 2nd Half	528	537	0.79%	0.84%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	985	N/A	1.54%		
FY 2016-17	552	328	0.85%	0.53%		
FY 2017-18 1st Half	532	531	0.76%	0.79%		
FY 2017-18 2nd Half	528	529	0.72%	0.75%		
FY 2017-18	530	530	0.74%	0.77%		
FY 2018-19 1st Half	1	1	0.00%	0.00%		
FY 2018-19 2nd Half	0	0	0.00%	0.00%		
FY 2018-19	1	1	0.00%	0.00%		

#### **Foster Care**

Federal law mandates that states provide Medicaid to individuals under Title IV-E of the Social Security Act (42 U.S.C. 470-479A) for adoption assistance and foster care. Title IV-E is a subpart of Title IV, Child Welfare, of the federal Social Security Act. Title IV-E provides federal reimbursement to states for the room and board costs of children placed in foster homes and other out-of-home placements. This is an entitlement program for children who are eligible and for whom the state can seek reimbursement. Eligibility is determined on family circumstances at the time when the child was removed from the home. Once eligible, the state determines if it can claim reimbursement for maintenance costs for the child. Adoption assistance is available for children with special health care needs who meet the same requirements. States have the option to extend Medicaid to former foster care children aged 18 through 20 years who were eligible for Title IV-E prior to their 18th birthday. During the 2007 legislative session, SB 07-002 was passed extending Medicaid eligibility through age 20 for children for whom adoption assistance or foster care maintenance payments are made under Title IV-E of the Social Security Act, which was implemented in July 2008. Eligibility for children receiving state subsidized adoption or foster care payments (non-Title IV-E) was extended through age 20 in the 2008 Legislative Session through SB 08-099, which was implemented in July 2009. Pursuant to the ACA, eligibility for children enrolled in Medicaid that turned 21 while in foster care was increased to age 26 in January 2014. This expansion was mandatory and was not subject to the Supreme Court of the United States ruling which found the Medicaid expansion unconstitutionally coercive of states.

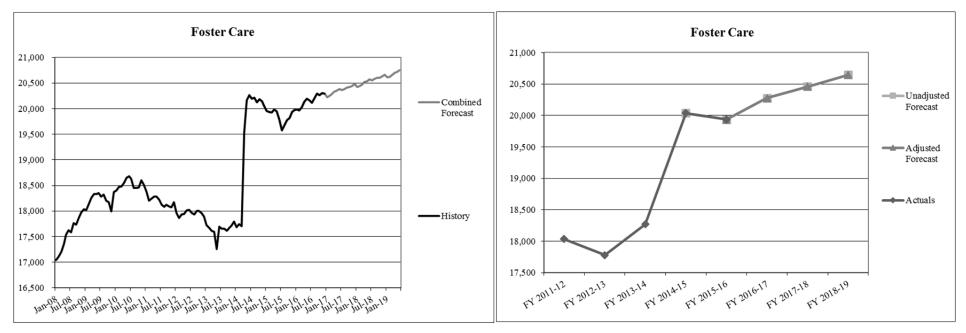
25.5-5-101 (1), C.R.S.

(e) Children for whom adoption assistance or foster care maintenance payments are made under Title IV-E of the "Social Security Act", as amended;

25.5-5-201 (1), C.R.S.

- (1) Children for whom subsidized adoption assistance payments are made by the state pursuant to article 7 of title 26, C.R.S, but who do not meet the requirements of Title IV-E of the "Social Security Act", as amended;
- (n) Individuals under the age of twenty-one years eligible for medical assistance pursuant to paragraph (l) of this subsection (1) or section 25.5-5-101 (1) (e) immediately prior to attaining the age of eighteen years or otherwise becoming emancipated;

### Foster Care: Model Results



Foster Care: Model Results <sup>1</sup>						
FY 2016-17	2016-17 FY 2014-15		Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change <sup>2</sup>
<b>Combined Forecast</b>	20,036	19,935	1.71%	1% 20,276 341		1,562
FY 2017-18	FY 2015-16	16   2016-17  J   2017-18		Level Change	Average Monthly Change <sup>2</sup>	
<b>Combined Forecast</b>	19,935	20,276	0.89%	20,456	180	15
FY 2018-19	Projected FY 2016-17 Caseload	2016-17   2017-18   Projected   2018-19   Cl		Level Change	Average Monthly Change <sup>2</sup>	
<b>Combined Forecast</b>	20,276	20,456	0.92%	20,643	187	16

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Foster Care: Trend Selections

FY 2016-17: 1.71% FY 2017-18: 0.89% FY 2018-19: 0.91%

# Foster Care: Justifications

• Average monthly caseload in FY 2015-16 for Foster Care was 19,935. Actual caseload for clients aged 22 to 26 in FY 2015-16 was 1,668, and in the first half of FY 2016-17 was 1,634; monthly actuals can be seen in the chart below. This population has been in decline over the last twelve months. The Department has changed this bottom-line adjustment accordingly.

SB 13-200 Medicaid Expansion Actuals				
Jan-16	1,694			
Feb-16	1,681			
Mar-16	1,678			
Apr-16	1,671			
May-16	1,663			
Jun-16	1,643			
Jul-16	1,614			
Aug-16	1,619			
Sep-16	1,613			
Oct-16	1,591			
Nov-16	1,577			
Dec-16	1,568			

- Beginning with the November 2015 forecast, the Department selected models separately for the age group 0-1, the age group 2-5, the age group 6-18, and the age group 19-26, in line with MAGI Eligible Children. However, beginning with the February 2017 forecast, the Department combined some of the previous age groups, into two groups: ages 0 to 18 and ages 19 to 26, as there was not a significant benefit to breaking them out at the more granular previous level. See below for more details.
- Caseload at the end of FY 2007-08 and FY 2008-09 began to increase, which is partially due to the implementation of SB 07-002 and SB 08-099, which expanded eligibility for Foster Care through age 20. The reasons for the decreases in FY 2011-12 and FY 2012-13 are still unknown and the Department will continue to monitor caseload trends in this category.

	Actuals	Monthly Change	% Change
Dec-14	20,056	-	
Jan-15	19,951	(105)	-0.52%
Feb-15	19,932	(19)	-0.10%
Mar-15	19,925	(7)	-0.04%
Apr-15	19,982	57	0.29%
May-15	19,945	(37)	-0.19%
Jun-15	19,791	(154)	-0.77%
Jul-15	19,578	(213)	-1.08%
Aug-15	19,676	98	0.50%
Sep-15	19,776	100	0.51%
Oct-15	19,814	38	0.19%
Nov-15	19,936	122	0.62%
Dec-15	19,975	39	0.20%
Jan-16	19,987	12	0.06%
Feb-16	19,963	(24)	-0.12%
Mar-16	20,028	65	0.33%
Apr-16	20,133	105	0.52%
May-16	20,196	63	0.31%
Jun-16	20,162	(34)	-0.17%
Jul-16	20,118	(44)	-0.22%
Aug-16	20,203	85	0.42%
Sep-16	20,296	93	0.46%
Oct-16	20,260	(36)	-0.18%
Nov-16	20,306	46	0.23%
Dec-16	20,296	(10)	-0.05%

November 2016 Forecast	
Forecasted December 2016 Level	20,188

Base trend from December 2016 level						
	FY 2016-17	20.271	1.69%	336		

	Foster Care: Historical Caseload and Projections						
	Caseload	% Change	Level Change				
FY 2003-04	14,914	-					
FY 2004-05	15,795	5.91%	881				
FY 2005-06	16,460	4.21%	665				
FY 2006-07	16,724	1.60%	264				
FY 2007-08	17,141	2.49%	417				
FY 2008-09	18,033	5.20%	892				
FY 2009-10	18,381	1.93%	348				
FY 2010-11	18,393	0.07%	12				
FY 2011-12	18,034	-1.95%	(359)				
FY 2012-13	17,777	-1.43%	(257)				
FY 2013-14	18,267	2.76%	490				
FY 2014-15	20,036	9.68%	1,769	November 2016 Projection			
FY 2015-16	19,935	-0.50%	(101)	FY 2015-16 19,935 -0.50%			
FY 2016-17	20,276	1.71%	341	FY 2016-17 20,185 1.25%			
FY 2017-18	20,456	0.89%	180	FY 2017-18 20,290 0.52%			
FY 2018-19	20,643	0.91%	187	FY 2018-19 20,305 0.07%			

Actuals					
	% Change				
6-month average	Change 22	0.11%			
12-month average	27	0.13%			
18-month average	28	0.14%			
24-month average	10	0.05%			

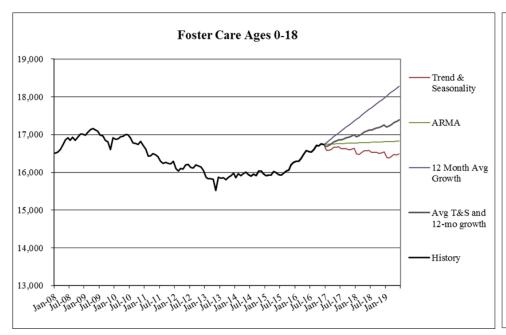
November 2016 Projection							
FY 2015-16	19,935	-0.50%	(101)				
FY 2016-17	20,185	1.25%	250				
FY 2017-18	20,290	0.52%	105				
FY 2018-19	20,305	0.07%	15				

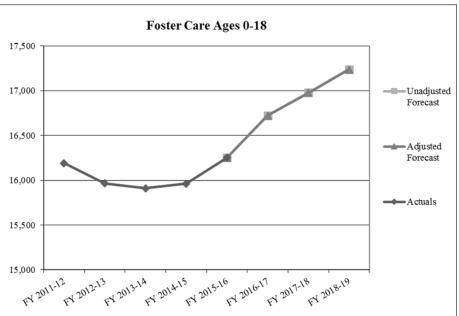
FY 2015-16	19,935	-0.50%	(101)
FY 2016-17	20,185	1.25%	250
FY 2017-18	20,290	0.52%	105
FY 2018-19	20,305	0.07%	15

Monthly Average Growth Actuals						
FY 2010-11 1st Half	(28)	-0.15%				
FY 2010-11 2nd Half	(48)	-0.26%				
FY 2010-11	(38)	-0.21%				
FY 2011-12 1st Half	(8)	-0.04%				
FY 2011-12 2nd Half	(25)	-0.14%				
FY 2011-12	(17)	-0.09%				
FY 2012-13 1st Half	(21)	-0.11%				
FY 2012-13 2nd Half	(35)	-0.18%				
FY 2012-13	(28)	-0.15%				
FY 2013-14 1st Half	17	0.10%				
FY 2013-14 2nd Half	413	2.26%				
FY 2013-14	215	1.18%				
FY 2014-15 1st Half	(35)	-0.17%				
FY 2014-15 2nd Half	(44)	-0.22%				
FY 2014-15	(40)	-0.20%				
FY 2015-16 1st Half	31	0.16%				
FY 2015-16 2nd Half	31	0.16%				
FY 2015-16	31	0.16%				

Monthly Average Growth Comparisons						
Pagnast	Monthly	Change	Percent	Percent Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	4	22	0.02%	0.11%		
FY 2016-17 2nd Half	19	15	0.09%	0.07%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	1	N/A	0.01%		
FY 2016-17	12	19	0.06%	0.09%		
FY 2017-18 1st Half	(3)	16	-0.02%	0.08%		
FY 2017-18 2nd Half	5	15	0.03%	0.07%		
FY 2017-18	1	15	0.00%	0.08%		
FY 2018-19 1st Half	(3)	16	-0.01%	0.08%		
FY 2018-19 2nd Half	6	15	0.03%	0.07%		
FY 2018-19	1	16	0.01%	0.08%		

# Foster Care, Age 0-18: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	FC 0-18	Constant, trend, seasonal dummy variables	14.96	14.64	0.3123
ARMA	d(FC 0-18)	Constant, AR(1), AR(2)	11.95	11.85	0.0015
12 Month Avg Growth			NA	NA	NA
Avg T&S and 12-mo growth			NA	NA	NA

Foster Care Ages 0-18: Model Results <sup>1</sup>							
FY 2016-17  FY 2014-15  FY 2015-16  FY 2015-16  Projected Growth Rate  Projected FY 2016-17 Caseload  Level Change 2							
Trend & Seasonality	15,961	16,252	2.46%	16,652	400	11	
ARMA	15,961	16,252	2.84%	16,714	462	17	
12 Month Avg Growth	15,961	16,252	3.35%	16,796	544	41	
Avg T&S and 12-mo growth	15,961	16,252	2.90%	16,723	471	26	

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	16,252	16,652	-0.44%	16,579	(73)	(8)
ARMA	16,252	16,714	0.38%	16,778	64	3
12 Month Avg Growth	16,252	16,796	3.47%	17,379	583	51
Avg T&S and 12-mo growth	16,252	16,723	1.52%	16,977	254	22

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	16,652	16,579	-0.59%	16,481	(98)	(8)
ARMA	16,714	16,778	0.20%	16,812	34	3
12 Month Avg Growth	16,796	17,379	3.54%	17,994	615	51
Avg T&S and 12-mo growth	16,723	16,977	1.53%	17,237	260	22

<sup>1</sup> Bold denotes Trend Selection

<sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# Foster Care, Age 0-18: Trend Selections

FY 2016-17: 2.90% FY 2017-18: 1.52% FY 2018-19: 1.53%

## Foster Care, Age 0-18: Justifications

Beginning with the November 2015 forecast, the Department began estimating this eligibility category with four age group sub-categories, to increase forecast accuracy. However, after evaluation of the effectiveness of these subcategories, the Department has begun estimating this eligibility category with two age group sub-categories, instead. Average monthly caseload growth was higher in the first half of FY 2016-17 than anticipated in the November 2016 forecast, at 31; the Department has brought up this forecast accordingly.

	Actuals	Monthly Change	% Change
Dec-14	15,971	-	-
Jan-15	15,910	(61)	-0.38%
Feb-15	15,925	15	0.09%
Mar-15	15,932	7	0.04%
Apr-15	16,023	91	0.57%
May-15	15,988	(35)	-0.22%
Jun-15	15,941	(47)	-0.29%
Jul-15	15,923	(18)	-0.11%
Aug-15	15,976	53	0.33%
Sep-15	16,039	63	0.39%
Oct-15	16,062	23	0.14%
Nov-15	16,194	132	0.82%
Dec-15	16,263	69	0.43%
Jan-16	16,286	23	0.14%
Feb-16	16,291	5	0.03%
Mar-16	16,372	81	0.50%
Apr-16	16,487	115	0.70%
May-16	16,571	84	0.51%
Jun-16	16,556	(15)	-0.09%
Jul-16	16,536	(20)	-0.12%
Aug-16	16,607	71	0.43%
Sep-16	16,714	107	0.64%
Oct-16	16,699	(15)	-0.09%
Nov-16	16,753	54	0.32%
Dec-16	16,739	(14)	-0.08%

November 2016 Forecast		
Forecasted December 2016 Level	16,639	

Base trend from December 2016 level				
FY 2016-17	16,707	2.80%	455	

	Foster Care Ages 0-18: Historical Caseload and Projections						
	Caseload	%	Level				
	Castillau	Change	Change				
FY 2007-08	16,618	-	-				
FY 2008-09	17,008	2.35%	390				
FY 2009-10	16,898	-0.65%	(110)				
FY 2010-11	16,634	-1.56%	(264)				
FY 2011-12	16,191	-2.66%	(443)				
FY 2012-13	15,964	-1.40%	(227)				
FY 2013-14	15,910	-0.34%	(54)				
FY 2014-15	15,961	0.32%	51		November 20	16 Pro	
FY 2015-16	16,252	1.82%	291	FY 2015-16	16,251	]	
FY 2016-17	16,723	2.90%	471	FY 2016-17	16,641	2	
FY 2017-18	16,977	1.52%	254	FY 2017-18	16,857	]	
FY 2018-19	17,237	1.53%	260	FY 2018-19	16,980	(	

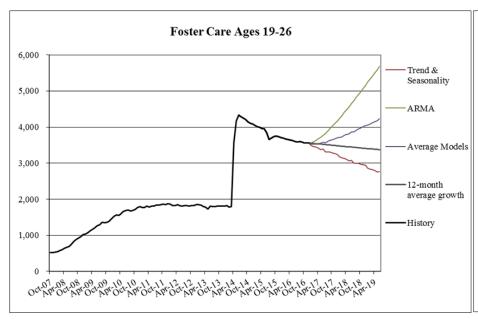
Actuals					
	Monthly Change	% Change			
6-month average	31	0.18%			
12-month average	40	0.24%			
18-month average	44	0.27%			
24-month average	32	0.20%			

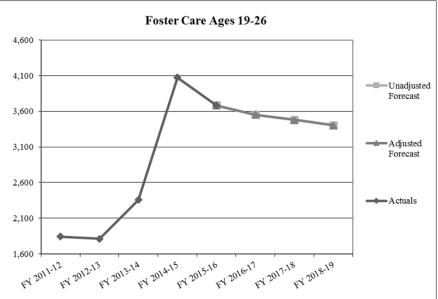
November 2016 Projection						
FY 2015-16	16,251	1.82%	290			
FY 2016-17	16,641	2.40%	390			
FY 2017-18	16,857	1.30%	216			
FY 2018-19	16,980	0.73%	123			

Monthly Average	e Growth Ac	tuals
FY 2010-11 1st Half	(47)	-0.28%
FY 2010-11 2nd Half	(50)	-0.30%
FY 2010-11	(49)	-0.29%
FY 2011-12 1st Half	(20)	-0.12%
FY 2011-12 2nd Half	(14)	-0.08%
FY 2011-12	(17)	-0.10%
FY 2012-13 1st Half	(27)	-0.17%
FY 2012-13 2nd Half	(29)	-0.17%
FY 2012-13	(28)	-0.17%
FY 2013-14 1st Half	18	0.11%
FY 2013-14 2nd Half	(8)	-0.05%
FY 2013-14	5	0.03%
FY 2014-15 1st Half	6	0.04%
FY 2014-15 2nd Half	(5)	-0.03%
FY 2014-15	0	0.00%
FY 2015-16 1st Half	54	0.33%
FY 2015-16 2nd Half	49	0.30%
FY 2015-16	51	0.32%

Monthly Average Growth Comparisons							
Request	Monthly	Change	Percent Change				
Request	R-1	S-1	R-1	S-1			
FY 2016-17 1st Half	14	31	0.08%	0.18%			
FY 2016-17 2nd Half	28	21	0.17%	0.13%			
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	12	N/A	0.07%			
FY 2016-17	21	26	0.13%	0.15%			
FY 2017-18 1st Half	6	22	0.04%	0.13%			
FY 2017-18 2nd Half	14	21	0.09%	0.12%			
FY 2017-18	10	22	0.06%	0.13%			
FY 2018-19 1st Half	6	22	0.04%	0.13%			
FY 2018-19 2nd Half	15	21	0.09%	0.12%			
FY 2018-19	10	22	0.06%	0.13%			

# Foster Care, Age 19-26: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	FC 19-26	Constant, April 2014 dummy, trend, seasonal dummy variables	19.16	18.84	0.811
ARMA	d(FC 19-26)	Constant, April 2014 dummy, AR(1), MA(1)	15.31	15.21	0.2414
Average Models			NA	NA	NA
12-month average growth			NA	NA	NA

Foster Care Ages 19-26: Model Results <sup>1</sup>							
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2	
Trend & Seasonality	4,075	3,684	-4.99%	3,500	(184)	(5)	
ARMA	4,075	3,684	-1.85%	3,616	(68)	(164)	
Average Models	4,075	3,684	-3.42%	3,558	(126)	(18)	
12-month average growth	4,075	3,684	-3.56%	3,553	(131)	14	

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	3,684	3,500	-8.51%	3,202	(298)	0
ARMA	3,684	3,616	16.65%	4,218	602	0
Average Models	3,684	3,558	4.27%	3,710	152	(26)
12-month average growth	3,684	3,553	-2.08%	3,479	(74)	73

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	3,500	3,202	-9.71%	2,891	(311)	0
ARMA	3,616	4,218	23.28%	5,200	982	0
Average Models	3,558	3,710	9.06%	4,046	336	(26)
12-month average growth	3,553	3,479	-2.10%	3,406	(73)	86

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Foster Care, Age 19-26: Trend Selections

FY 2016-17: -3.56% FY 2017-18: -2.08% FY 2018-19: -2.10%

# Foster Care, Age 19-26: Justifications

Beginning with the November 2015 forecast, the Department began estimating this eligibility category with four age group sub-categories, to increase forecast accuracy. However, after evaluation of the effectiveness of these subcategories, the Department has begun estimating this eligibility category with two age group sub-categories, instead. FY 2015-16 actual average monthly growth was -20 clients per month, and average monthly growth in the first half of FY 2016-17 was -8 clients per month. The Department has adjusted the current forecast upward slightly. In the past, the SB 13-200 Medicaid expansion effects were accounted for through a bottom-line adjustment. Beginning with the November 2016 forecast, the Department has determined that there are now enough data points available since expansion for robust statistical modeling and has removed the adjustment in favor of more sophisticated models.

## FY 2017-18 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly	%	
		Change	Change	
Dec-14	4,085	-		
Jan-15	4,041	(44)	-1.08%	
Feb-15	4,007	(34)	-0.84%	
Mar-15	3,993	(14)	-0.35%	
Apr-15	3,959	(34)	-0.85%	
May-15	3,957	(2)	-0.05%	
Jun-15	3,850	(107)	-2.70%	
Jul-15	3,655	(195)	-5.06%	
Aug-15	3,700	45	1.23%	
Sep-15	3,737	37	1.00%	
Oct-15	3,752	15	0.40%	
Nov-15	3,742	(10)	-0.27%	
Dec-15	3,712	(30)	-0.80%	
Jan-16	3,701	(11)	-0.30%	
Feb-16	3,672	(29)	-0.78%	
Mar-16	3,656	(16)	-0.44%	
Apr-16	3,646	(10)	-0.27%	
May-16	3,625	(21)	-0.58%	
Jun-16	3,606	(19)	-0.52%	
Jul-16	3,582	(24)	-0.67%	
Aug-16	3,596	14	0.39%	
Sep-16	3,582	(14)	-0.39%	
Oct-16	3,561	(21)	-0.59%	
Nov-16	3,553	(8)	-0.22%	
Dec-16	3,557	4	0.11%	

November 2016 Forecast	
Forecasted December 2016 Level	3,549

Base tr	end from De	cember 201	6 level
FY 2016-17	3,564	-3.25%	(120)

	Caseload	%	Level
	Castidau	Change	Change
FY 2007-08	592	-	-
FY 2008-09	1,025	73.14%	433
FY 2009-10	1,484	44.78%	459
FY 2010-11	1,759	18.53%	275
FY 2011-12	1,844	4.83%	85
FY 2012-13	1,813	-1.68%	(31)
FY 2013-14	2,357	30.01%	544
FY 2014-15	4,075	72.89%	1,718
FY 2015-16	3,684	-9.60%	(391)
FY 2016-17	3,553	-3.56%	(131)
FY 2017-18	3,479	-2.08%	(74)
FY 2018-19	3,406	-2.10%	(73)

Act	uals	
	Monthly Change	% Change
6-month average	(8)	-0.23%
12-month average	(13)	-0.35%

(16)

(22)

-0.43%

-0.57%

18-month average

24-month average

		0.1	
	Caseload	%	Level
		Change	Change
FY 2007-08	592	-	-
FY 2008-09	1,025	73.14%	433
FY 2009-10	1,484	44.78%	459
FY 2010-11	1,759	18.53%	275
FY 2011-12	1,844	4.83%	85
FY 2012-13	1,813	-1.68%	(31)
FY 2013-14	2,357	30.01%	544
FY 2014-15	4,075	72.89%	1,718
FY 2015-16	3,684	-9.60%	(391)
FY 2016-17	3,553	-3.56%	(131)
FY 2017-18	3,479	-2.08%	(74)

November 2016 Projection					
FY 2015-16	3,684	-9.60%	(391)		
FY 2016-17	3,544	-3.80%	(140)		
FY 2017-18	3,433	-3.13%	(111)		
FY 2018-19	3,325	-3.15%	(108)		

Foster Care Ages 19-26: Historical Caseload and Projections

	FY 2012-13 2	nd Half	(6)	-0.30%
	FY 2012-13		0	0.03%
	FY 2013-14 1	st Half	(1)	-0.04%
	FY 2013-14 2	nd Half	420	19.74%
	FY 2013-14		210	9.85%
	FY 2014-15 1	st Half	(41)	-0.97%
	FY 2014-15 2	nd Half	(39)	-0.98%
	FY 2014-15		(40)	-0.98%
	FY 2015-16 1	st Half	(23)	-0.58%
	FY 2015-16 2	nd Half	(18)	-0.48%
	FY 2015-16		(20)	-0.53%
Month	ly Average G	rowth Compa	risons	
	Monthly Change		Percent	Change
Request	R-1	S-1	R-1	S-1
2016-17 1st Half	(10)	(8)	-0.27%	-0.23%
2016-17 2nd Half	(9)	(6)	-0.27%	-0.18%

Monthly Average Growth Actuals

19

10

12

(11)

0

1.11%

0.11%

0.61%

0.63%

-0.61%

0.01%

0.36%

FY 2010-11 1st Half

FY 2010-11 2nd Half

FY 2011-12 1st Half

FY 2011-12 2nd Half

FY 2012-13 1st Half

FY 2010-11

FY 2011-12

Monthly Average Growth Comparisons					
	Monthly	Change	Percent Change		
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	(10)	(8)	-0.27%	-0.23%	
FY 2016-17 2nd Half	(9)	(6)	-0.27%	-0.18%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	(11)	N/A	-0.30%	
FY 2016-17	(9)	(7)	-0.27%	-0.20%	
FY 2017-18 1st Half	(9)	(6)	-0.27%	-0.18%	
FY 2017-18 2nd Half	(9)	(6)	-0.27%	-0.18%	
FY 2017-18	(9)	(6)	-0.27%	-0.18%	
FY 2018-19 1st Half	(9)	(6)	-0.27%	-0.18%	
FY 2018-19 2nd Half	(9)	(6)	-0.27%	-0.18%	
FY 2018-19	(9)	(6)	-0.27%	-0.18%	

Clients Ages 22-26					
133%	FPL				
Dec-14	1,802				
Jan-15	1,794				
Feb-15	1,764				
Mar-15	1,759				
Apr-15	1,751				
May-15	1,747				
Jun-15	1,709				
Jul-15	1,586				
Aug-15	1,636				
Sep-15	1,683				
Oct-15	1,690				
Nov-15	1,695				
Dec-15	1,701				
Jan-16	1,694				
Feb-16	1,681				
Mar-16	1,678				
Apr-16	1,671				
May-16	1,663				
Jun-16	1,643				
Jul-16	1,614				
Aug-16	1,619				
Sep-16	1,613				
Oct-16	1,591				
Nov-16	1,577				
Dec-16	1,568				

#### **MAGI Eligible Pregnant Adults**

Between 1986 and 1991, Congress extended Medicaid to new groups of pregnant women and children. Referred to as Baby and Kid Care in Colorado, the program was authorized through the Medicare Catastrophic Coverage Act of 1988. The program enrolls Baby Care women and Kid Care children (see the Eligible Children section of this document for information on children). Baby Care-Adults are women with incomes up to 185% FPL beginning January 1, 2013 (195% FPL after income disregards are applied in October 2013). Coverage includes prenatal care and delivery services, plus 60 days of postpartum care. The Baby and Kid Care Program serves a much higher income level than the 1931 families program, and pregnant mothers were never subject to resource/asset limitations to qualify for the program. Moreover, the Baby and Kid Care Program has never had a cash-assistance component and was unaffected by welfare reform.

# 25.5-5-101 (1), C.R.S.

(m) Low-income pregnant women, and children through the age of six, whose income is at or below a certain percentage of the federal poverty level as determined by the federal government;

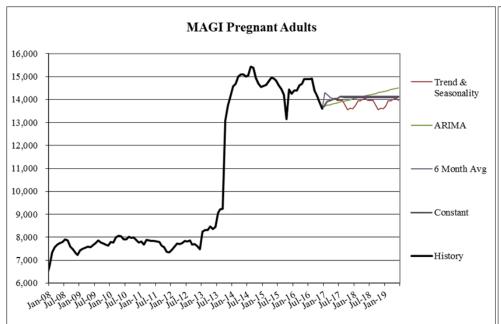
#### 25.5-5-201 (2), C.R.S.

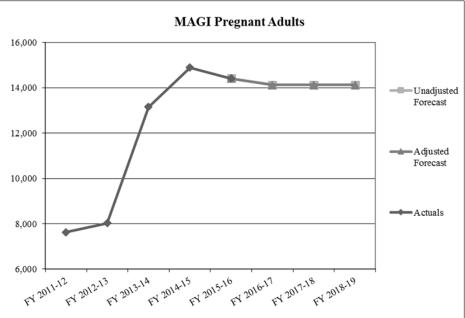
(b) Notwithstanding the five-year waiting period established in paragraph (a) of this subsection (2), but subject to the availability of sufficient appropriations and the receipt of federal financial participation, the state department may provide benefits under this article and articles 4 and 6 of this title to a pregnant woman who is a qualified alien and a child under nineteen years of age who is a qualified alien so long as such woman or child meets eligibility criteria other than citizenship.

#### 25.5-5-205 (3), C.R.S.

- (a) On and after April 1, 1990, children under the age of six years and pregnant women shall be eligible for benefits under the baby and kid care program...
- (II) For pregnant women, the percentage level of the federal poverty line, as defined pursuant to 42 U.S.C. sec. 9902 (2), used to determine eligibility under this subsection (3) shall be one hundred eighty-five percent. If the federal government establishes a new federal minimum percentage level of the federal poverty line used to determine eligibility under this subsection (3) that is different from the level set in this subparagraph (II), the state department is authorized to meet such federal minimum level without requiring additional legislation; however, such minimum federal level shall be established by rule of the state board.

# MAGI Pregnant Adults: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Pregnant	Constant, SB 250 dummy, October 2013 dummy, trend, seasonal dummy variables	17.29	17.10	0.811
ARIMA	d(MAGI Pregnant)	Constant, October 2013 dummy, AR(2), MA(1)	14.7	14.56	0.3543
6 Month Avg			NA	NA	NA
Constant			NA	NA	NA

MAGI Pregnant Adults: Model Results <sup>1</sup>							
FY 2016-17	FY 2014-15 FY 2015-16 Projected Growth Rate Projected FY 2016-17 Change Change Ch						
Trend & Seasonality	14,897	14,413	-2.01%	14,123	(290)	(77)	
ARIMA	14,897	14,413	-2.52%	14,050	(363)	(86)	
6 Month Avg	14,897	14,413	-1.37%	14,216	(197)	(69)	
Constant	14,897	14,413	-1.96%	14,131	(282)	(70)	

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	14,413	14,123	-2.01%	13,839	(284)	0
ARIMA	14,413	14,050	-0.13%	14,032	(18)	27
6 Month Avg	14,413	14,216	-0.95%	14,081	(135)	2
Constant	14,413	14,131	0.00%	14,131	0	7

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	14,123	13,839	0.01%	13,840	1	0
ARIMA	14,050	14,032	2.32%	14,358	326	27
6 Month Avg	14,216	14,081	-0.03%	14,077	(4)	0
Constant	14,131	14,131	0.00%	14,131	0	0

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# MAGI Pregnant Adults: Trend Selections

FY 2016-17: -1.96% FY 2017-18: 0.00% FY 2018-19: 0.00%

### MAGI Pregnant Adults: Justifications

- Average monthly caseload in FY 2015-16 for MAGI Pregnant Adults was 14,413. The December 2016 data point was nearly 1,000 under the predicted value in the November 2016 forecast. Therefore, the Department has adjusted the forecast downward accordingly.
- In October 2013, over 3,000 clients were moved from MAGI Parents/Caretakers categories into MAGI Pregnant Adults. This was a one-time change in how pregnant adults were categorized by eligibility.
- Presumptive eligibility allows pregnant women who apply for Medicaid to receive services based on self-declaration until the status of their application has been determined. The State pays for all Medicaid costs during this time regardless of whether or not the woman was eventually found to be Medicaid eligible or not. On September 1, 2004, the Department discontinued this procedure, which explains the drop of nearly 2,500 clients in September and October 2004, as well as the corresponding decline in fiscal year average caseload. Presumptive eligibility was reinstated by HB 05-1262 (Tobacco Tax bill) effective July 1, 2005.
- In FY 2009-10, the Department received approval from the Centers for Medicare and Medicaid Services to grant full Medicaid eligibility to pregnant women who are legal permanent residents and have been in the country for less than 5 years, as authorized by the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA). As a result, the Department has restated the FY 2009-10 monthly caseload for this eligibility type to include clients who had previously been in the State-only Prenatal population. These clients are now included in the base caseload.
- The Colorado Department of Public Health & Environment Family Planning Initiative was awarded a grant for approximately \$3.5 million to address the issue of unintended pregnancy in Colorado for Title X clients, the vast majority of which are under 200% of the federal poverty level. Out-year trends are moderate due to this Family Planning initiative (as well as the Family Planning waiver to be submitted by the Department pursuant to SB 08-003).

	Actuals	Monthly	%
	Actuals	Change	Change
Dec-14	14,542	-	-
Jan-15	14,590	48	0.33%
Feb-15	14,643	53	0.36%
Mar-15	14,804	161	1.10%
Apr-15	14,954	150	1.01%
May-15	14,914	(40)	-0.27%
Jun-15	14,822	(92)	-0.62%
Jul-15	14,627	(195)	-1.32%
Aug-15	14,466	(161)	-1.10%
Sep-15	14,204	(262)	-1.81%
Oct-15	13,139	(1,065)	-7.50%
Nov-15	14,428	1,289	9.81%
Dec-15	14,252	(176)	-1.22%
Jan-16	14,399	147	1.03%
Feb-16	14,381	(18)	-0.13%
Mar-16	14,619	238	1.65%
Apr-16	14,675	56	0.38%
May-16	14,884	209	1.42%
Jun-16	14,883	(1)	-0.01%
Jul-16	14,896	13	0.09%
Aug-16	14,911	15	0.10%
Sep-16	14,401	(510)	-3.42%
Oct-16	14,168	(233)	-1.62%
Nov-16	13,876	(292)	-2.06%
Dec-16	13,608	(268)	-1.93%

November 2016 Forecas	t
Forecasted December 2016 Level	14,562

Base trend from December 2016 level					
FY 2016-17	13,959	-3.15%	(454)		

		MAGI Preg	gnant Adults	: Historical Caseload ar	nd Projectio	ns
	Caseload	% Change	Level Change			
FY 2003-04	8,398	-	-			
FY 2004-05	5,984	-28.74%	(2,414)			
FY 2005-06	5,119	-14.46%	(865)			
FY 2006-07	5,182	1.23%	63			
FY 2007-08	6,288	21.34%	1,106			
FY 2008-09	6,976	10.94%	688			
FY 2009-10	7,830	12.24%	854			
FY 2010-11	7,868	0.49%	38			
FY 2011-12	7,630	-3.02%	(238)			
FY 2012-13	8,024	5.16%	394			
FY 2013-14	13,160	64.01%	5,136			
FY 2014-15	14,897	13.20%	1,737	N	lovember 20	16
FY 2015-16	14,413	-3.25%	(484)	FY 2015-16	14,413	
FY 2016-17	14,131	-1.96%	(282)	FY 2016-17	14,765	
FY 2017-18	14,131	0.00%	0	FY 2017-18	14,766	
FY 2018-19	14,131	0.00%	0	FY 2018-19	14,767	

Actuals				
	Monthly	%		
	Change	Change		
6-month average	(213)	-1.47%		
12-month average	(54)	-0.37%		
18-month average	(67)	-0.42%		
24-month average	(39)	-0.24%		

November 2016 Projection					
FY 2015-16	14,413	-3.25%	(484)		
FY 2016-17	14,765	2.44%	352		
FY 2017-18	14,766	0.01%	1		
FY 2018-19	14,767	0.01%	1		

Monthly Average Growth Actuals				
FY 2010-11 1st Half	(23)	-0.29%		
FY 2010-11 2nd Half	11	0.15%		
FY 2010-11	(6)	-0.07%		
FY 2011-12 1st Half	(83)	-1.08%		
FY 2011-12 2nd Half	86	1.14%		
FY 2011-12	2	0.03%		
FY 2012-13 1st Half	(63)	-0.82%		
FY 2012-13 2nd Half	165	2.17%		
FY 2012-13	51	0.68%		
FY 2013-14 1st Half	947	9.77%		
FY 2013-14 2nd Half	145	1.00%		
FY 2013-14	546	5.39%		
FY 2014-15 1st Half	(78)	-0.51%		
FY 2014-15 2nd Half	47	0.32%		
FY 2014-15	(15)	-0.09%		
FY 2015-16 1st Half	(95)	-0.52%		
FY 2015-16 2nd Half	105	0.73%		
FY 2015-16	5	0.10%		

Monthly Average Growth Comparisons					
Paguast	Monthly	Change	Percent	Percent Change	
Request	R-1	S-1	R-1	S-1	
FY 2016-17 1st Half	(54)	(213)	-0.36%	-1.47%	
FY 2016-17 2nd Half	54	73	0.37%	0.53%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	213	N/A	1.51%	
FY 2016-17	0	(70)	0.00%	-0.47%	
FY 2017-18 1st Half	(54)	14	-0.36%	0.10%	
FY 2017-18 2nd Half	54	0	0.37%	0.00%	
FY 2017-18	0	7	0.00%	0.05%	
FY 2018-19 1st Half	(54)	0	-0.36%	0.00%	
FY 2018-19 2nd Half	54	0	0.37%	0.00%	
FY 2018-19	0	0	0.00%	0.00%	

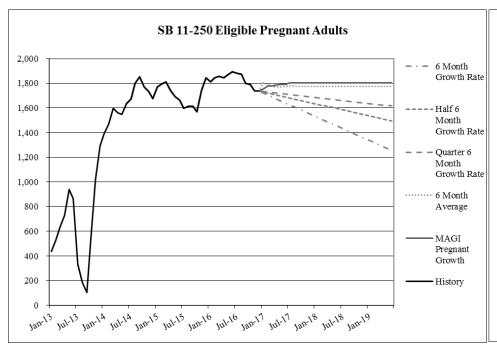
## **SB 11-250 Eligible Pregnant Adults**

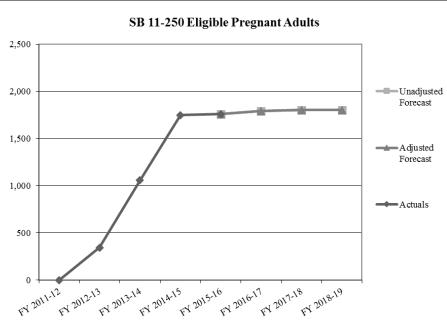
Prior to the implementation of SB 11-250 in January 2013, pregnant adults whose family income was under 133% FPL were eligible for Medicaid. SB 11-250 increased the FPL threshold up to 185% FPL, 195% FPL with income disregards applied after October 2013. Services for clients that would have been eligible for CHP+ before the implementation of SB 11-008 receive the enhanced CHP+ federal match. These clients are identified as Medicaid eligible pregnant adults with incomes above 142% FPL and no other insurance.

25.5-5-201 (1)

(m.5) Pregnant women, whose family income does not exceed one hundred eighty-five percent of the federal poverty line, adjusted for family size.

# SB 11-250 Eligible Pregnant Adults: Model Results





SB 11-250 Eligible Pregnant Adults: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
6 Month Growth Rate	1,749	1,759	-1.02%	1,741	(18)	(21)
Half 6 Month Growth Rate	1,749	1,759	-0.23%	1,755	(4)	(17)
Quarter 6 Month Growth Rate	1,749	1,759	0.17%	1,762	3	(15)
6 Month Average	1,749	1,759	1.88%	1,792	33	(10)
MAGI Pregnant Growth	1,749	1,759	1.82%	1,791	32	(8)

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
6 Month Growth Rate	1,759	1,741	-11.77%	1,536	(205)	(16)
Half 6 Month Growth Rate	1,759	1,755	-6.78%	1,636	(119)	(8)
Quarter 6 Month Growth Rate	1,759	1,762	-4.31%	1,686	(76)	(4)
6 Month Average	1,759	1,792	-0.89%	1,776	(16)	0
MAGI Pregnant Growth	1,759	1,791	0.67%	1,803	12	1

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
6 Month Growth Rate	1,741	1,536	-12.50%	1,344	(192)	(16)
Half 6 Month Growth Rate	1,755	1,636	-5.87%	1,540	(96)	(8)
Quarter 6 Month Growth Rate	1,762	1,686	-2.85%	1,638	(48)	(4)
6 Month Average	1,792	1,776	-0.06%	1,775	(1)	0
MAGI Pregnant Growth	1,791	1,803	0.00%	1,803	0	0

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### SB 11-250 Eligible Pregnant Adults: Trend Selections

FY 2016-17: 1.82% FY 2017-18: 0.67% FY 2018-19: 0.00%

### SB 11-250 Eligible Pregnant Adults: Justifications

- Average monthly caseload in FY 2015-16 for SB 11-250 Eligible Pregnant Adults was 1,759. The December 2016 data point was nearly 200 below the predicted value in the November 2016 forecast. The Department has adjusted the forecast downward from the November 2016 forecast, based on negative average monthly growth rates for the first half of FY 2016-17.
- Data issues from July 2013 through November 2013 prevented the Department from identifying these clients, significant drops in caseload can be seen for these months. The Department believes that these issues have been resolved and all appropriate clients can now be identified.
- These clients are identified as Medicaid eligible pregnant adults with incomes above 142% FPL and no other insurance.

	Actuals	Monthly Change	% Change
Dec-14	1,675	_	-
Jan-15	1,772	97	5.79%
Feb-15	1,795	23	1.30%
Mar-15	1,810	15	0.84%
Apr-15	1,743	(67)	-3.70%
May-15	1,694	(49)	-2.81%
Jun-15	1,665	(29)	-1.71%
Jul-15	1,596	(69)	-4.14%
Aug-15	1,615	19	1.19%
Sep-15	1,614	(1)	-0.06%
Oct-15	1,568	(46)	-2.85%
Nov-15	1,743	175	11.16%
Dec-15	1,846	103	5.91%
Jan-16	1,811	(35)	-1.90%
Feb-16	1,846	35	1.93%
Mar-16	1,856	10	0.54%
Apr-16	1,846	(10)	-0.54%
May-16	1,870	24	1.30%
Jun-16	1,893	23	1.23%
Jul-16	1,883	(10)	-0.53%
Aug-16	1,872	(11)	-0.58%
Sep-16	1,797	(75)	-4.01%
Oct-16	1,790	(7)	-0.39%
Nov-16	1,738	(52)	-2.91%
Dec-16	1,736	(2)	-0.12%

November 2016 Forecas	t
Forecasted December 2016 Level	1,924

Base trend from December 2016 level					
FY 2016-17	1,769	0.59%	10		

	SB 11	l-250 Eligib	le Pregnant	Adults: His	torical Case	load and Pr	ojections
	Caseload	%	Level				
	Caseloau	Change	Change				
FY 2012-13	344	-	-				
FY 2013-14	1,057	207.27%	713				
FY 2014-15	1,749	65.47%	692		N	lovember 20	16 Proje
FY 2015-16	1,759	0.57%	10		FY 2015-16	1,759	0.5
FY 2016-17	1,791	1.82%	32		FY 2016-17	1,926	9.4
FY 2017-18	1,803	0.67%	12		FY 2017-18	1,988	3.22
FY 2018-19	1,803	0.00%	0		FY 2018-19	2,050	3.12

Actuals				
	Monthly Change	% Change		
6-month average	(26)	-1.42%		
12-month average	(9)	-0.50%		
18-month average	4	0.29%		
24-month average	3	0.21%		

November 2016 Projection					
FY 2015-16	1,759	0.57%	10		
FY 2016-17	1,926	9.49%	167		
FY 2017-18	1,988	3.22%	62		
FY 2018-19	2,050	3.12%	62		

Monthly Averag	e Growth Act	uals
FY 2010-11 1st Half	0	
FY 2010-11 2nd Half	0	-
FY 2010-11	0	-
FY 2011-12 1st Half	0	-
FY 2011-12 2nd Half	0	-
FY 2011-12	0	-
FY 2012-13 1st Half	0	-
FY 2012-13 2nd Half	144	-
FY 2012-13	72	-
FY 2013-14 1st Half	72	64.40%
FY 2013-14 2nd Half	57	4.06%
FY 2013-14	64	34.23%
FY 2014-15 1st Half	7	0.50%
FY 2014-15 2nd Half	(2)	-0.05%
FY 2014-15	3	0.23%
FY 2015-16 1st Half	30	1.87%
FY 2015-16 2nd Half	8	0.43%
FY 2015-16	19	1.15%

Monthly Average Growth Comparisons						
Dannast	Monthly	Change	Percent	Change		
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	5	(26)	0.27%	-1.42%		
FY 2016-17 2nd Half	5	9	0.27%	0.53%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	36	N/A	2.04%		
FY 2016-17	5	(8)	0.27%	-0.45%		
FY 2017-18 1st Half	5	2	0.26%	0.10%		
FY 2017-18 2nd Half	5	0	0.26%	0.00%		
FY 2017-18	5	1	0.26%	0.05%		
FY 2018-19 1st Half	5	0	0.25%	0.00%		
FY 2018-19 2nd Half	5	0	0.25%	0.00%		
FY 2018-19	5	0	0.25%	0.00%		

### Non-Citizens – Emergency Services Only

Section 403 of the Personal Responsibility Work Opportunity Reconciliation Act provides that certain immigrants arriving in the United States after August 22, 1996 are ineligible for full Medicaid benefits for their first five years of residence. The five-year ban only applies to immigrants who arrived in the United States after August 22, 1996. Full Medicaid coverage of individuals for the first five years is optional. Per federal regulations, states must provide mandatory full coverage for:

- Refugees for the first seven years after entry into the United States;
- Asylees for the first seven years after asylum is granted;
- Individuals whose deportation is being withheld for the first seven years after the initial withhold;
- Victims of trafficking;
- Lawful permanent residents who have 40 qualifying quarters of Social Security coverage;
- Cuban or Haitian entrants; and,
- Immigrants who are honorably discharged veterans of the United States military.

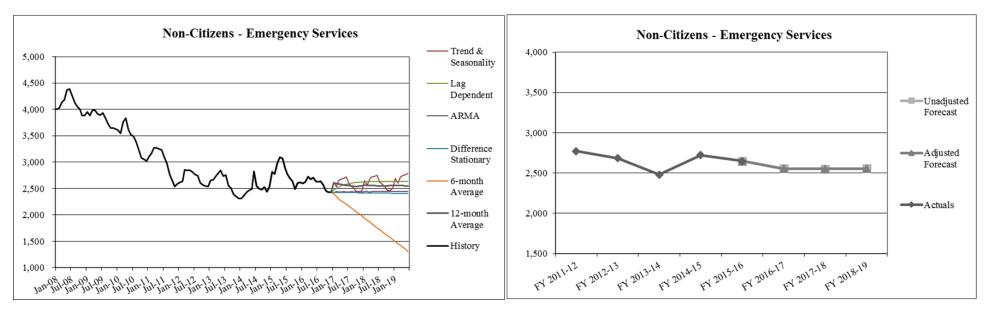
Regardless of whether the individual is an optional or mandatory immigrant, federal law requires all states to provide emergency medical services for individuals who otherwise meet Medicaid eligibility criteria, except for proof of U.S. citizenship.

In April 2001, an eligibility policy change was implemented such that clients are now only counted as eligible in the months they receive emergency medical care. Prior to this policy change, eligibility for this group continued as it would for any other category, although only for emergency medical services. For example, a Non-Citizen with an emergency visit on April 2000 could be eligible in that month, and continue to be eligible for as many months as he/she met other eligibility criteria. The same client would only be eligible for one month, had the emergency service occurred in April 2001. Thus, caseloads presented from April 2001 and forward are much lower than in previous years.

### 25.5-5-103 (3), C.R.S.

(a) Emergency medical assistance shall be provided to any person who is not a citizen of the United States, including undocumented aliens, aliens who are not qualified aliens, and qualified aliens who entered the United States on or after August 22, 1996, who has an emergency medical condition and meets one of the categorical requirements set forth in section 25.5-5-101; except that such persons shall not be required to meet any residency requirement other than that required by federal law.

# Non-Citizens- Emergency Services Only: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	NC	Constant, trend, and seasonal dummy variables	14.13	13.55	-0.0269
Lag Dependent	NC	Constant and 6 lags on the dependent variable	12.4	12.31	0.6473
ARMA	NC	Constant, AR(1), AR(2), AR(3), MA(1), MA(2), MA(3), MA(4)	14.58	14.49	0.3366
Difference Stationary	dlog(NC)	Constant and 2 lags on the dependent variable	-3.12	-3.14	0.2240
12-month Average			NA	NA	NA
6-month Average			NA	NA	NA

Non-Citizens- Emergency Services: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	2,722	2,649	-2.34%	2,587	(62)	177
Lag Dependent	2,722	2,649	-4.42%	2,532	(117)	166
ARMA	2,722	2,649	-6.38%	2,480	(169)	153
Difference Stationary	2,722	2,649	-6.57%	2,475	(174)	152
12-month Average	2,722	2,649	-3.62%	2,553	(96)	164
6-month Average	2,722	2,649	-9.02%	2,410	(239)	134

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	2,649	2,587	0.04%	2,588	1	3
Lag Dependent	2,649	2,532	3.55%	2,622	90	4
ARMA	2,649	2,480	-1.61%	2,440	(40)	1
Difference Stationary	2,649	2,475	-2.30%	2,418	(57)	(1)
12-month Average	2,649	2,553	-0.08%	2,551	(2)	(1)
6-month Average	2,649	2,410	-18.71%	1,959	(451)	(37)

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	2,587	2,588	1.39%	2,624	36	3
Lag Dependent	2,532	2,622	0.53%	2,636	14	0
ARMA	2,480	2,440	0.20%	2,445	5	1
Difference Stationary	2,475	2,418	-0.37%	2,409	(9)	(1)
12-month Average	2,553	2,551	0.08%	2,553	2	0
6-month Average	2,410	1,959	-22.72%	1,514	(445)	(37)

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### Non-Citizens: Trend Selections

FY 2016-17: -3.62% FY 2017-18: -0.08% FY 2018-19: 0.08%

### Non-Citizens: Justifications

- Average monthly caseload in FY 2015-16 for Non-Citizens was 2,649. The December 2016 data point was approximately 200 under the predicted value in the November 2016 forecast. The average monthly growth in the first half of FY 2016-17 was -34. The Department has dampened the current forecast.
- The caseload declines in FY 2006-07 and FY 2007-08 may indicate that eligibility spans for the Non-Citizens clients are now being ended sooner, caused by eligibility technicians actively working more cases because they are required to collect citizenship information. In addition, it is possible that some undocumented citizens are not applying for Medicaid emergency services out of fear due to the Deficit Reduction Act and HB 06S-1023 identification requirements, even though the Medicaid application clearly states that emergency services are exempt. Although the effects of these state and federal legislations, as well as the 60-day post-partum policy change, are unquantifiable, the Department believes that these large declines are unlikely to continue. The Department believes that the caseload volatility in this eligibility type beginning in FY 2008-09 are somewhat related to those experienced in the Baby Care-Adults caseload, as a large portion of the Non-Citizens caseload are pregnant women. Though the cause of this volatility is unknown at this time, the Department does not anticipate that large decreases will continue.
- In the past, this forecast included an adjustment for the effects of SB 13-200 Medicaid expansion; however, beginning with the November 2016 forecast, the Department has determined that there are now sufficient data points to forecast with expansion using statistical modeling, and has removed this adjustment accordingly.

## FY 2017-18 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly Change	% Change
Dec-14	2,541	-	
Jan-15	2,811	270	10.63%
Feb-15	2,775	(36)	-1.28%
Mar-15	2,984	209	7.53%
Apr-15	3,096	112	3.75%
May-15	3,070	(26)	-0.84%
Jun-15	2,885	(185)	-6.03%
Jul-15	2,774	(111)	-3.85%
Aug-15	2,699	(75)	-2.70%
Sep-15	2,635	(64)	-2.37%
Oct-15	2,491	(144)	-5.46%
Nov-15	2,605	114	4.58%
Dec-15	2,616	11	0.42%
Jan-16	2,593	(23)	-0.889
Feb-16	2,631	38	1.479
Mar-16	2,722	91	3.469
Apr-16	2,675	(47)	-1.73%
May-16	2,707	32	1.20%
Jun-16	2,635	(72)	-2.66%
Jul-16	2,630	(5)	-0.199
Aug-16	2,634	4	0.15%
Sep-16	2,571	(63)	-2.39%
Oct-16	2,455	(116)	-4.51%
Nov-16	2,434	(21)	-0.86%
Dec-16	2,430	(4)	-0.16%

November 2016 Forecas	t
Forecasted December 2016 Level	2,648

Base tr	end from De	ecember 201	6 level
FY 2016-17	2.478	-6.46%	(171)

			Non-	tizens- Emergency Services: Historical Caseload and Projec	ctions
	Caseload	% Change	Level Change	Over 108%	
FY 2003-04	4,793	-	-	700	
FY 2004-05	5,150	7.45%	357	600	~
FY 2005-06	6,212	20.62%	1,062	500	
FY 2006-07	5,201	-16.27%	(1,011)	,	
FY 2007-08	4,191	-19.42%	(1,010)		
FY 2008-09	3,987	-4.87%	(204)	300	
FY 2009-10	3,693	-7.37%	(294)	200	
FY 2010-11	3,213	-13.00%	(480)	100	
FY 2011-12	2,770	-13.79%	(443)	0	
FY 2012-13	2,684	-3.10%	(86)	There there there are the top the there there is the contact the the the	(24, 10),
FY 2013-14	2,481	-7.56%	(203)	, 4, 4, , 2, 4, 1, 4, 4, , 2, 4, 1, 4, 6	Ar ,
FY 2014-15	2,722	9.71%	241	November 2016 Projection	
FY 2015-16	2,649	-2.68%	(73)	FY 2015-16 2,649 -2.68% (73)	
FY 2016-17	2,553	-3.62%	(96)	FY 2016-17 2,646 -0.11% (3)	
FY 2017-18	2,551	-0.08%	(2)	FY 2017-18 2,648 0.08% 2	
FY 2018-19	2,553	0.08%	2	FY 2018-19 2,649 0.04% 1	

Actuals				
	Monthly Change	% Change		
6-month average	(34)	-1.33%		
12-month average	(16)	-0.59%		
18-month average	(25)	-0.92%		
24-month average	(5)	-0.11%		



November 2016 Projection					
FY 2015-16	2,649	-2.68%	(73)		
FY 2016-17	2,646	-0.11%	(3)		
FY 2017-18	2,648	0.08%	2		
FY 2018-19	2,649	0.04%	1		

FY 2010-11 1st Half	(83)	-2.50%
FY 2010-11 2nd Half	34	1.12%
FY 2010-11	(24)	-0.69%
FY 2011-12 1st Half	(106)	-3.57%
FY 2011-12 2nd Half	38	1.45%
FY 2011-12	(34)	-1.06%
FY 2012-13 1st Half	(46)	-1.70%
FY 2012-13 2nd Half	33	1.29%
FY 2012-13	(7)	-0.20%
FY 2013-14 1st Half	(71)	-2.76%
FY 2013-14 2nd Half	85	3.47%
FY 2013-14	7	0.36%
FY 2014-15 1st Half	(47)	-1.63%
FY 2014-15 2nd Half	57	2.29%
FY 2014-15	5	0.33%
FY 2015-16 1st Half	(45)	-1.56%
FY 2015-16 2nd Half	3	0.14%
FY 2015-16	(21)	-0.71%

Monthly Average Growth Comparisons					
Dogwood	Monthly	Change	Percent	Change	
Request	R-1 S-1		R-1	S-1	
FY 2016-17 1st Half	2	(34)	0.08%	-1.33%	
FY 2016-17 2nd Half	(0)	22	-0.02%	0.90%	
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	36	N/A	1.41%	
FY 2016-17	1	(6)	0.03%	-0.21%	
FY 2017-18 1st Half	1	(1)	0.03%	-0.04%	
FY 2017-18 2nd Half	(0)	(0)	-0.01%	-0.01%	
FY 2017-18	0	(1)	0.01%	-0.02%	
FY 2018-19 1st Half	0	0	0.00%	0.02%	
FY 2018-19 2nd Half	(0)	(0)	0.00%	-0.01%	
FY 2018-19	0	0	0.00%	0.00%	

Clients 10	8%-133%
FI	PL
Dec-14	520
Jan-15	564
Feb-15	550
Mar-15	593
Apr-15	592
May-15	608
Jun-15	561
Jul-15	528
Aug-15	529
Sep-15	539
Oct-15	531
Nov-15	571
Dec-15	583
Jan-16	576
Feb-16	601
Mar-16	631
Apr-16	613
May-16	618
Jun-16	593
Jul-16	581
Aug-16	585
Sep-16	588
Oct-16	572
Nov-16	597
Dec-16	605

## **Partial Dual Eligibles**

Medicare-eligible beneficiaries who have incomes at a certain federal poverty level and limited resources may qualify to have Medicaid cover some of their out-of-pocket expenses, such as their Medicare Part B premiums and other coinsurance and deductibles. The two groups of clients that qualify for this cost-sharing program are Qualified Medicare Beneficiaries and Special Low Income Medicare Beneficiaries. This group, formerly known as Qualified Medicare Beneficiaries/Special Low Income Medicare Beneficiaries, is now collectively known as Partial Dual Eligibles. Qualified Medicare Beneficiaries have incomes at or below 100% of the federal poverty level, and resources twice the standard allowed under the federal Supplemental Security Income program. These clients receive hospital insurance and supplementary medical insurance premium coverage along with Medicare coinsurance and deductibles. Special Low Income Medicare Beneficiaries have incomes greater than 100% of the federal poverty level, but less than 120%. For Special Low Income Medicare Beneficiaries, Medicaid only pays the supplementary medical insurance premiums.

### 25.5-5-101 (1), C.R.S.

(1) Individuals with income and resources at a level which qualifies them as Medicare-eligible under section 301 of Title III of the federal "Medicare Catastrophic Coverage Act".

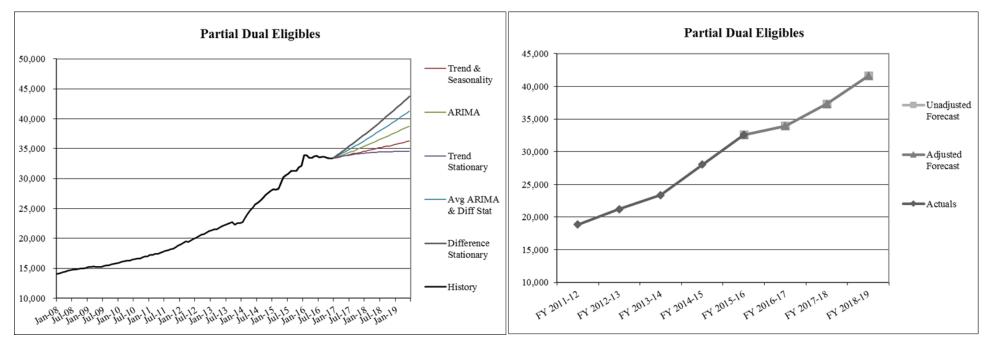
#### 25.5-5-104, C.R.S.

Qualified Medicare beneficiaries are Medicare-eligible individuals with income and resources at a level which qualifies them as eligible under section 301 of Title III of the federal "Medicare Catastrophic Coverage Act of 1988", as amended, or subsequent amending federal legislation.

#### 25.5-5-105, C.R.S.

Qualified disabled and working individuals are persons with income and resources and disability status, as determined by the social security administration, which qualify them as "qualified disabled and working individuals" under sections 6012 and 6408 of the federal "Omnibus Budget Reconciliation Act of 1989", or subsequent amending federal legislation. The state department is hereby designated as the single state agency to administer benefits available to qualified disabled and working individuals. Such benefits are limited to Medicare cost-sharing expenses as determined by the federal government.

# Partial Dual Eligibles: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	PDE	Constant, trend, seasonal dummy variables	18.89	18.72	0.8942
ARIMA	d(PDE)	Constant, AR(1), AR(2), MA(1)	14.33	14.19	0.0383
Trend Stationary	log(PDE)	Constant, trend, 2 lags on the dependent variable	-5.74	-5.92	0.9907
Difference Stationary	dlog(PDE)	Constant and 1 lag on the dependent variable	-4.53	-4.56	0.0080
Avg ARIMA & Diff Stat			NA	NA	NA

Partial Dual Eligibles: Model Results <sup>1</sup>						
FY 2016-17	FY 2014-15	FY 2015-16	Projected Growth Rate	Projected FY 2016-17 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	28,045	32,585	3.11%	33,598	1,013	13
ARIMA	28,045	32,585	3.38%	33,686	1,101	37
Trend Stationary	28,045	32,585	3.11%	33,598	1,013	7
Difference Stationary	28,045	32,585	4.24%	33,967	1,382	116
Avg ARIMA & Diff Stat	28,045	32,585	3.81%	33,826	1,241	77

FY 2017-18	FY 2015-16	Projected FY 2016-17 Caseload	Projected Growth Rate	Projected FY 2017-18 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	32,585	33,598	2.86%	34,559	961	96
ARIMA	32,585	33,686	5.12%	35,411	1,725	181
Trend Stationary	32,585	33,598	1.87%	34,226	628	44
Difference Stationary	32,585	33,967	9.97%	37,354	3,387	336
Avg ARIMA & Diff Stat	32,585	33,826	7.56%	36,383	2,557	259

FY 2018-19	Projected FY 2016-17 Caseload	Projected FY 2017-18 Caseload	Projected Growth Rate	Projected FY 2018-19 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	33,598	34,559	3.34%	35,713	1,154	96
ARIMA	33,686	35,411	6.44%	37,691	2,280	194
Trend Stationary	33,598	34,226	0.80%	34,500	274	8
Difference Stationary	33,967	37,354	11.45%	41,631	4,277	374
Avg ARIMA & Diff Stat	33,826	36,383	9.01%	39,661	3,278	284

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# Partial Dual Eligibles: Trend Selections

FY 2016-17: 4.24% FY 2017-18: 9.97% FY 2018-19: 11.45%

### Partial Dual Eligibles: Justification

- Average monthly caseload in FY 2015-16 for Partial Dual Eligibles was 32,585. The December 2016 data point was over 2,000 lower than the previous estimate in the November 2016 request. The Department has lowered the forecast, accordingly.
- These clients have higher income than Adults 65 and Older or Disabled Adults 60 to 64, and are relatively healthy. Given the increased life expectancy, more people are living healthier longer, which would support strong growth rates in this population. In addition, this population may be affected by the "baby boomers", defined by the U.S. Census Bureau as the generation born between 1946 and 1964, beginning in calendar year 2006.
- Caseload trends are somewhat correlated with age and economic indicators. The assets and annuities provisions in the Deficit Reduction Act of 2005 may also contribute to growth in this category, as some clients who might have qualified for the Adults 65 and Older category now have too much income or assets.
- Caseload growth in this category was positive and steady between FY 1999-00 and FY 2003-04. Caseload experienced an unprecedented contraction on FY 2004-05, due to large monthly declines that occurred as a result of the court order regarding the Colorado Benefits Management System. The relatively strong growth since the beginning of FY 2005-06 may be due to a wood work effect from the Medicare Modernization Act, under which Medicare Part D clients are screened for Medicaid as they apply for the low-income subsidy.

	Actuals	Monthly Change	% Change
Dec-14	27,944	-	-
Jan-15	28,226	282	1.01%
Feb-15	28,158	(68)	-0.24%
Mar-15	28,332	174	0.62%
Apr-15	29,170	838	2.96%
May-15	30,224	1,054	3.61%
Jun-15	30,560	336	1.11%
Jul-15	30,877	317	1.04%
Aug-15	31,244	367	1.19%
Sep-15	31,278	34	0.11%
Oct-15	31,293	15	0.05%
Nov-15	31,903	610	1.95%
Dec-15	32,143	240	0.75%
Jan-16	33,921	1,778	5.53%
Feb-16	33,939	18	0.05%
Mar-16	33,442	(497)	-1.46%
Apr-16	33,478	36	0.11%
May-16	33,693	215	0.64%
Jun-16	33,813	120	0.36%
Jul-16	33,512	(301)	-0.89%
Aug-16	33,636	124	0.37%
Sep-16	33,623	(13)	-0.04%
Oct-16	33,461	(162)	-0.48%
Nov-16	33,416	(45)	-0.13%
Dec-16	33,390	(26)	-0.08%

November 2016 Forecast		
Forecasted December 2016 Level	35,724	

Base trend from December 2016 level					
FY 2016-17	33,448	2.65%	863		

		Partial Dua	l Eligibles:	Historical Caseload	and Projec	tions
	Caseload	% Change	Level Change			
FY 2003-04	9,842	-	-			
FY 2004-05	9,605	-2.41%	(237)			
FY 2005-06	11,092	15.48%	1,487			
FY 2006-07	12,908	16.37%	1,816			
FY 2007-08	14,214	10.12%	1,306			
FY 2008-09	15,075	6.06%	861			
FY 2009-10	15,919	5.60%	844			
FY 2010-11	17,090	7.36%	1,171			
FY 2011-12	18,871	10.42%	1,781			
FY 2012-13	21,206	12.37%	2,335			
FY 2013-14	23,378	10.24%	2,172			
FY 2014-15	28,045	19.96%	4,667	N	ovember 20	16 Pr
FY 2015-16	32,585	16.19%	4,540	FY 2015-16	32,585	10
FY 2016-17	33,967	4.24%	1,382	FY 2016-17	35,909	10
FY 2017-18	37,354	9.97%	3,387	FY 2017-18	40,135	1
FY 2018-19	41,631	11.45%	4,277	FY 2018-19	44,859	1

Actuals			
	Monthly	%	
	Change	Change	
6-month average	(71)	-0.21%	
12-month average	104	0.33%	
18-month average	157	0.50%	
24-month average	227	0.76%	

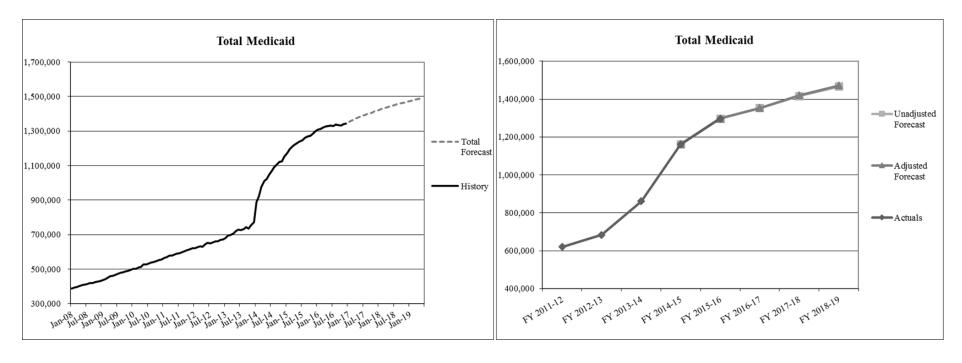
November 2016 Projection					
FY 2015-16	32,585	16.19%	4,540		
FY 2016-17	35,909	10.20%	3,324		
FY 2017-18	40,135	11.77%	4,226		
FY 2018-19	44,859	11.77%	4,724		

1						
Monthly Average	Monthly Average Growth Actuals					
FY 2010-11 1st Half	85	0.51%				
FY 2010-11 2nd Half	121	0.70%				
FY 2010-11	103	0.60%				
FY 2011-12 1st Half	179	0.98%				
FY 2011-12 2nd Half	189	0.98%				
FY 2011-12	184	0.98%				
FY 2012-13 1st Half	215	1.05%				
FY 2012-13 2nd Half	158	0.73%				
FY 2012-13	187	0.89%				
FY 2013-14 1st Half	61	0.28%				
FY 2013-14 2nd Half	524	2.20%				
FY 2013-14	292	1.24%				
FY 2014-15 1st Half	378	1.42%				
FY 2014-15 2nd Half	436	1.51%				
FY 2014-15	407	1.47%				
FY 2015-16 1st Half	264	0.85%				
FY 2015-16 2nd Half	278	0.87%				
FY 2015-16	271	0.86%				

Monthly Average Growth Comparisons						
Dogwood	Monthly	Change	Percent Change			
Request	R-1	S-1	R-1	S-1		
FY 2016-17 1st Half	319	(71)	0.92%	-0.21%		
FY 2016-17 2nd Half	341	303	0.93%	0.89%		
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	730	N/A	2.15%		
FY 2016-17	330	116	0.93%	0.34%		
FY 2017-18 1st Half	360	327	0.93%	0.91%		
FY 2017-18 2nd Half	381	345	0.93%	0.91%		
FY 2017-18	370	336	0.93%	0.91%		
FY 2018-19 1st Half	403	364	0.93%	0.91%		
FY 2018-19 2nd Half	426	385	0.93%	0.91%		
FY 2018-19	414	374	0.93%	0.91%		

#### TOTAL MEDICAID SUMMARY

Average monthly caseload for total Medicaid in FY 2015-16 was 1,296,986. The December 2016 data point was nearly 65,000, or 4.56%, lower than the previous estimate from the November 2016 request, driven primarily by MAGI Parents/Caretakers to 68% FPL, MAGI Eligible Children, AND/AB, MAGI Parents/Caretakers 69-133% FPL, and Partial Dual Eligibles. Beginning in November 2016, all adjustments for expansion populations under SB 13-200 have been removed and the data has been incorporated into the statistical modeling behind the forecasts. The Department predicts continued caseload growth in FY 2016-17, though lower than that estimated in the previous forecast, with growth leveling out in future years as the Department believes that the aggressive caseload growth associated with the expansionary period will continue to stabilize. Average monthly caseload for total Medicaid in FY 2016-17 is projected to grow by 4.33% from FY 2015-16, and then 4.97% from FY 2016-17 to FY 2017-18 and 3.65% from FY 2017-18 to FY 2018-19.



## FY 2017-18 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly	%
		Change	Change
Dec-14	1,153,171	-	
Jan-15	1,172,532	19,361	1.68%
Feb-15	1,194,129	21,597	1.84%
Mar-15	1,209,912	15,783	1.32%
Apr-15	1,221,991	12,079	1.00%
May-15	1,232,067	10,076	0.82%
Jun-15	1,241,434	9,367	0.76%
Jul-15	1,247,541	6,107	0.49%
Aug-15	1,261,268	13,727	1.10%
Sep-15	1,269,735	8,467	0.67%
Oct-15	1,272,951	3,216	0.25%
Nov-15	1,283,903	10,952	0.86%
Dec-15	1,298,364	14,461	1.13%
Jan-16	1,308,021	9,657	0.74%
Feb-16	1,313,386	5,365	0.41%
Mar-16	1,321,725	8,339	0.63%
Apr-16	1,326,889	5,164	0.39%
May-16	1,329,076	2,187	0.16%
Jun-16	1,330,977	1,901	0.14%
Jul-16	1,327,920	(3,057)	-0.23%
Aug-16	1,338,692	10,772	0.81%
Sep-16	1,334,903	(3,789)	-0.28%
Oct-16	1,332,134	(2,769)	-0.21%
Nov-16	1,341,398	9,264	0.70%
Dec-16	1,343,704	2,306	0.17%

November 2016 Forecast	
Forecasted December 2016 Level	1,407,839

Base trend from December 2016 level			
FY 2016-17	1,340,081	3.33%	43,142

	Caseload	% Change	Level Change
FY 2003-04	367,559	-	-
FY 2004-05	406,024	10.46%	38,465
FY 2005-06	402,218	-0.94%	(3,806)
FY 2006-07	392,229	-2.48%	(9,989)
FY 2007-08	391,962	-0.07%	(267)
FY 2008-09	436,812	11.44%	44,850
FY 2009-10	498,797	14.19%	61,985
FY 2010-11	560,759	12.42%	61,962
FY 2011-12	619,963	10.56%	59,204
FY 2012-13	682,994	10.17%	63,031
FY 2013-14	860,957	26.06%	177,963
FY 2014-15	1,161,157	34.87%	300,200
FY 2015-16	1,296,939	11.69%	135,782
FY 2016-17	1,352,514	4.29%	55,575
FY 2017-18	1,416,675	4.74%	64,161
FY 2018-19	1,467,002	3.55%	50,327

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Total Ac	ljustments
FY 2015-16	47
FY 2016-17	556
FY 2017-18	3,592
FY 2018-19	5,117

February 2016 Projections After Adjustments				
FY 2015-16	1,296,986	11.70%	135,829	
FY 2016-17	1,353,070	4.33%	56,084	
FY 2017-18	1,420,267	4.97%	67,197	
FY 2018-19	1,472,119	3.65%	51,852	

Actuals			
	Monthly Change	% Change	
6-month average	2,121	0.16%	
12-month average	3,778	0.29%	
18-month average	5,682	0.44%	
24-month average	7,939	0.64%	

Total Medicaid: Historical Caseload and Projections
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November 2016 Projection Before Adjustments				
FY 2015-16	1,296,939	11.69%	135,782	
FY 2016-17	1,406,286	8.43%	109,347	
FY 2017-18	1,473,464	4.78%	67,178	
FY 2018-19	1,518,135	3.03%	44,671	

Total .	Adjustments
FY 2015-16	47
FY 2016-17	8,630
FY 2017-18	11,172
FY 2018-19	12,697

November 2016 Projection After Adjustments				
FY 2015-16	1,296,986	11.70%	135,829	
FY 2016-17	1,414,916	9.09%	117,930	
FY 2017-18	1,484,636	4.93%	69,720	
FY 2018-19	1,530,832	3.11%	46,196	

rowth Ac	tuals				
	Monthly Average Growth Actuals				
4,891	0.91%				
5,468	0.96%				
5,179	0.93%				
5,312	0.88%				
5,054	0.80%				
5,183	0.84%				
3,460	0.53%				
9,533	1.37%				
6,496	0.95%				
7,313	0.99%				
45,752	5.29%				
26,533	3.14%				
17,618	1.62%				
14,711	1.24%				
16,164	1.43%				
9,488	0.75%				
5,436	0.41%				
7,462	0.58%				
	5,468 5,179 5,312 5,054 5,183 3,460 9,533 6,496 7,313 45,752 26,533 17,618 14,711 16,164 9,488 5,436				

Monthly Average Growth Comparisons				
Request	Monthly Change		Percent Change	
	R-1	S-1	R-1	S-1
FY 2016-17 1st Half	12,810	2,121	0.94%	0.16%
FY 2016-17 2nd Half	12,034	6,828	0.84%	0.50%
FY 2016-17 2nd Half to Reach R-1 Estimate	N/A	22,723	N/A	1.68%
FY 2016-17	12,422	4,475	0.89%	0.33%
FY 2017-18 1st Half	422	5,614	0.03%	0.40%
FY 2017-18 2nd Half	1,210	4,782	0.08%	0.33%
FY 2017-18	816	5,198	0.05%	0.37%
FY 2018-19 1st Half	6,189	3,833	0.41%	0.26%
FY 2018-19 2nd Half	6,489	3,692	0.42%	0.25%
FY 2018-19	6,339	3,762	0.42%	0.26%